625.13
N484h
v.6
pt.2

NEW YORK STATE BRIDGE AND TUNNEL COMMISSION

AND

NEW JERSEY INTERSTATE BRIDGE AND TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6

OPEN APPROACHES AND TUNNELS BETWEEN PROVOST STREET AND A POINT ABOUT ONE THOUSAND (1,000) FEET WEST OF THE RIVER BULKHEAD NEAR THE LINE OF TWELFTH STREET PRODUCED, JERSEY CITY

NEW JERSEY

CONTRACT DRAWINGS 1 to 35

1924

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NEW YORK STATE BRIDGE AND TUNNEL COMMISSION

AND

NEW JERSEY INTERSTATE BRIDGE AND TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6

OPEN APPROACHES AND TUNNELS BETWEEN PROVOST STREET AND A POINT ABOUT ONE THOUSAND (1,000) FEET WEST OF THE RIVER BULKHEAD NEAR THE LINE OF TWELFTH STREET PRODUCED, JERSEY CITY

NEW JERSEY

CONTRACT DRAWINGS 1 to 35

1924

625.13
N484h
v.6
pt.2

TALMADGE

NEW YORK STATE BRIDGE AND TUNNEL COMMISSION

AND

NEW JERSEY INTERSTATE BRIDGE AND TUNNEL COMMISSION

NEW YORK STATE BRIDGE AND TUNNEL COMMISSION

George R. Dyer, Chairman

E. W. Bloomingdale, Vice-Chairman

McDougall Hawkes

A. J. Shamberg

William W. Mills
Commissioner of Plant and Structures of New York City

Dwight B. La Du
State Engineer and Surveyor

Paul Windels, Counsel

Morris M. Frohlich, Secretary

NEW JERSEY INTERSTATE BRIDGE AND TUNNEL COMMISSION

Theodore Boettger, Chairman

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John F. Boyle

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Weller H. Noyes

Robert S. Sinclair

Frank L. Suplee

Robert Carey, Counsel

John C. McEnroe, Secretary

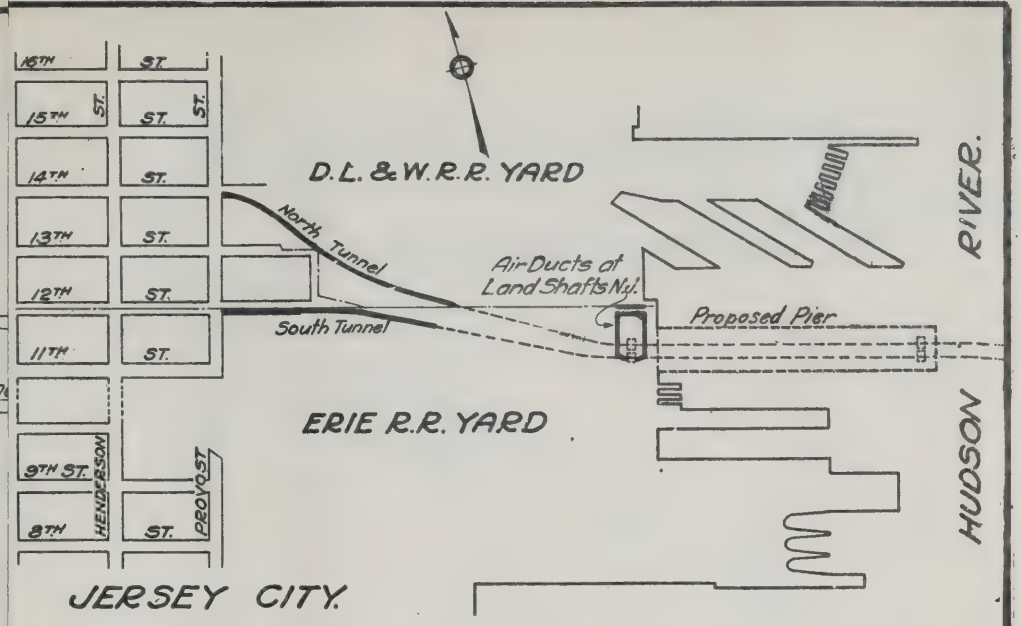
Clifford M. Holland
Chief Engineer

M. B. Brown Printing & Binding Co.,
37-41 Chambers Street, N. Y.

LIST OF CONTRACT DRAWINGS

Contract No. 6

1. North and South Tunnels, New Jersey—Plan and Profile.
2. South Tunnel, New Jersey—Plan, Longitudinal Section and Section AA.
3. North Tunnel, New Jersey—Plan, Longitudinal Section and Sections BB and CC.
4. South Tunnel, New Jersey—Plan and Longitudinal Sections.
5. North Tunnel, New Jersey—Plan and Longitudinal Sections.
6. North Tunnel, New Jersey—Plan and Longitudinal Sections.
7. North Tunnel, New Jersey—Sections AA, BB and CC.
8. North Tunnel, New Jersey—Sections DD and EE.
9. North and South Tunnels, New Jersey—Sections FF and GG.
10. North and South Tunnels, New Jersey—Interior Details.
11. North and South Tunnels, New Jersey—Concrete Details.
12. North and South Tunnels, New Jersey—Concrete Details.
13. High Tension Duct Splicing Chamber.
14. Tunnel Niches and Manholes.
15. Air Duct Manhole.
16. Cast Iron Exhaust Port—Type A6.
17. Cast Iron Exhaust Port—Type E3.
18. Air Ducts at Land Shafts, New Jersey—Foundation Plan.
19. Air Ducts at Land Shafts, New Jersey—Invert Plan.
20. Air Ducts at Land Shafts, New Jersey—Upper Air Duct Floor Plan.
21. Air Ducts at Land Shafts, New Jersey—Roof Plan.
22. Air Ducts at Land Shafts, New Jersey—Sections AA, BB, CC, DD, EE and FF.
23. Air Ducts at Land Shafts, New Jersey—Sections GG, HH, KK, LL, MM and QQ.
24. Air Ducts at Land Shafts, New Jersey—Section JJ.
25. Air Ducts at Land Shafts, New Jersey—Sections NN, OO and PP.
26. Girder and Column Schedules.
27. Electrical Conduit System.
28. Electrical Conduit System.
29. Cast Iron Light Box.
30. Cast Iron Pull Boxes.
31. Plan of Sewer Construction.
32. Sewer Details.
33. Sewer Details.
34. Tracks to be Maintained During Construction and Change of Grade of Erie Railroad Yard
35. Area Available for Contractor's Use.



KEY PLAN.

49'2.5

P.C. Sta. 2+47.40

14TH (Base Lin

13TH

12TH STR

For Plan and Sections of Tunnels	see Drg. No.	2-9	File No.	1-6
For Interior Details	" "	10	"	1-6
For Concrete Details	" "	11-12	"	1-6
For High Tension Duct Splicing Chamber	" "	13	"	1-6
For Niches and Manholes	" "	14-15	"	1-6
For Exhaust Port Castings	" "	16-17	"	1-6
For Air-Ducts at Land Shafts N.J.	" "	18-25	"	1-6
For Girder and Column Schedules	" "	26	"	1-6
For Electrical Conduit System	" "	27-30	"	1-6
For Sewer Construction	" "	31-33	"	1-6
For Tracks to be maintained	" "	34	"	1-6
For Area available for Contractor's Use	" "	35	"	1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 1

SCALE: HOR. 0 10 20 30 60 FEET
VERT. 0 5 10 20 FEET

DATE: SEPTEMBER 10, 1924

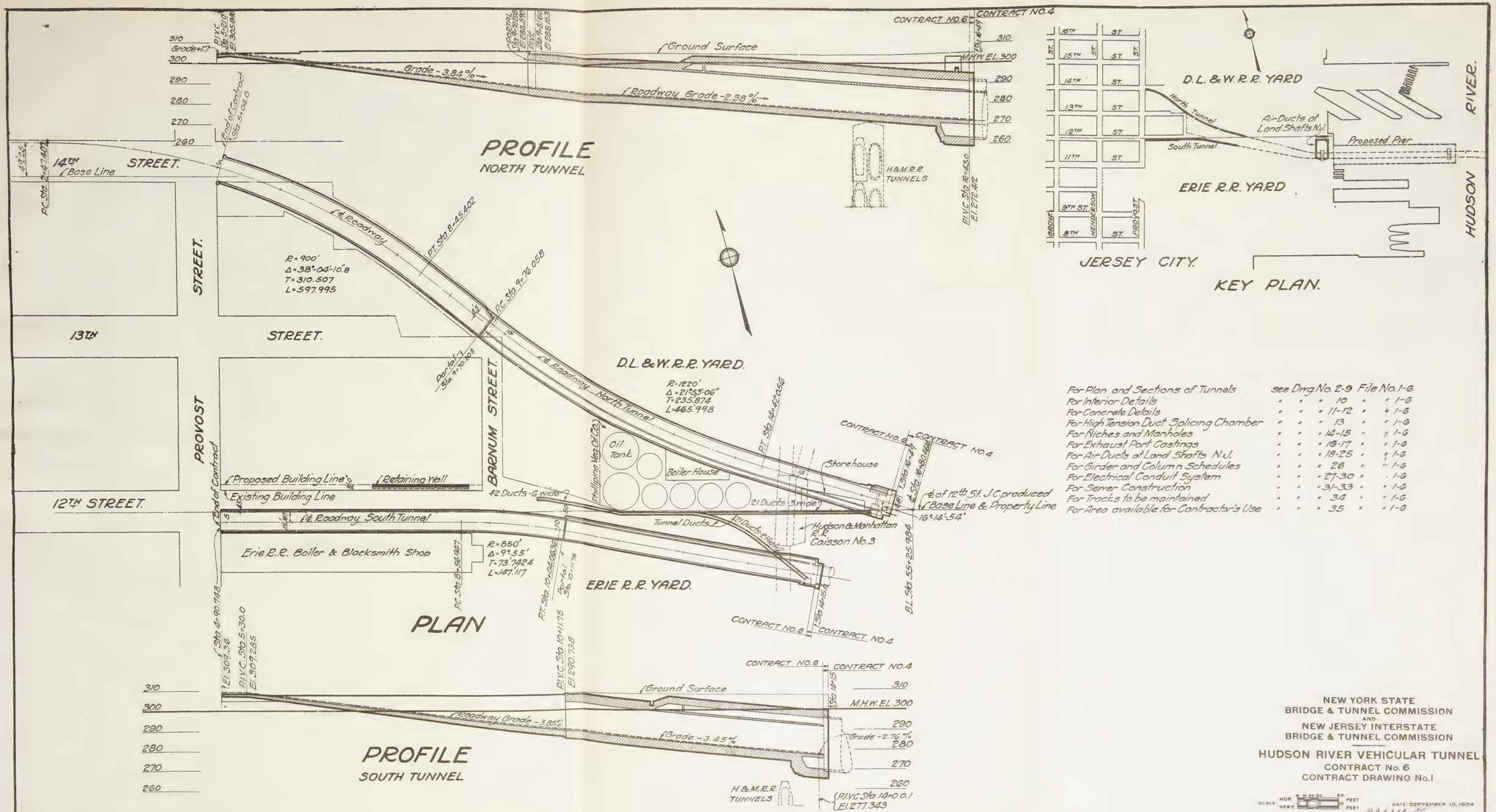
CHIEF ENGINEER

DRAWN BY M.S.
CHECKED BY M.E. E.W.

FILE NO. 1-6

ENGINEER OF D

M. B. BROWN PRINTING & BINDING CO., N Y



For Plan and Sections of Tunnels	see Drg. No.	2-9	File No. 1-6
For Interior Details	" "	10	" 1-6
For Concrete Details	" "	11-12	" 1-6
For High Tension Duct Splicing Chamber	" "	13	" 1-6
For Niches and Manholes	" "	14-15	" 1-6
For Exhaust Port Castings	" "	16-17	" 1-6
For Air Ducts at Land Shafts N.J.	" "	18-25	" 1-6
For Girder and Column Schedules	" "	26	" 1-6
For Electrical Conduit System	" "	27-30	" 1-6
For Sewer Construction	" "	31-33	" 1-6
For Tracks to be maintained	" "	34	" 1-6
For Area available for Contractor's Use	" "	35	" 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 1

SCALE HOR 0 10 20 30 60 FEET
VERT 0 10 50 FEET

DATE: SEPTEMBER 10, 1924

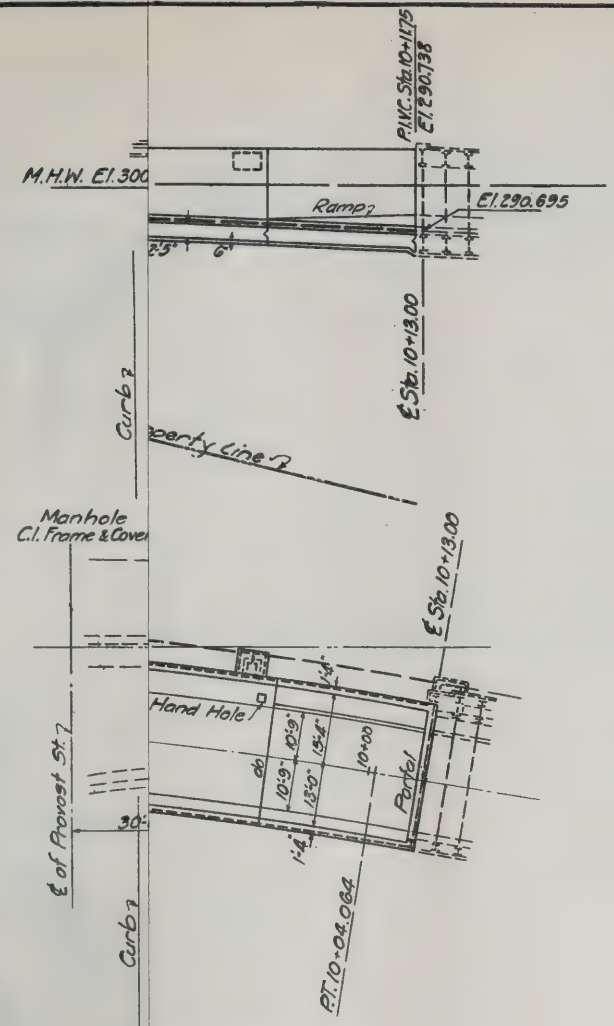
DRAWN BY M.J.
CHECKED BY M.E. Lw

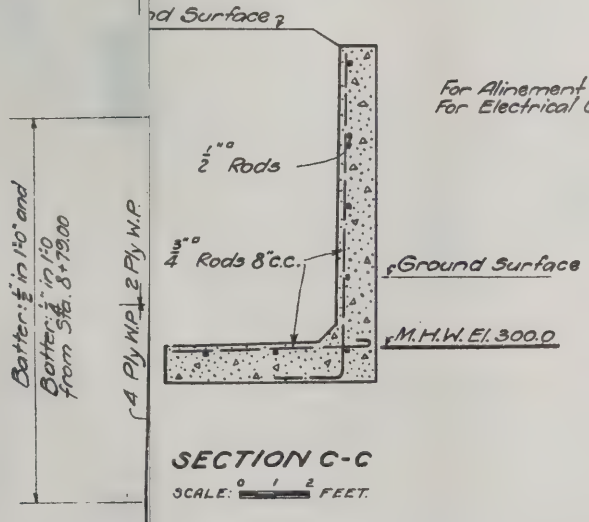
CHIEF ENGINEER

FILE NO. 1-6

Ole Singstad
ENGINEER OF DESIGNS.

M. B. BROWN PRINTING & BINDING CO., N. Y.





SECTION C-C

SCALE: 0 1 2 FEET.

For Alinement and Profile see Dwg. No. 1 File No. 1-6
For Electrical Conduit System " " 27-30 " " 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 2

SCALE: AS SHOWN

DATE: SEPTEMBER 10, 1924

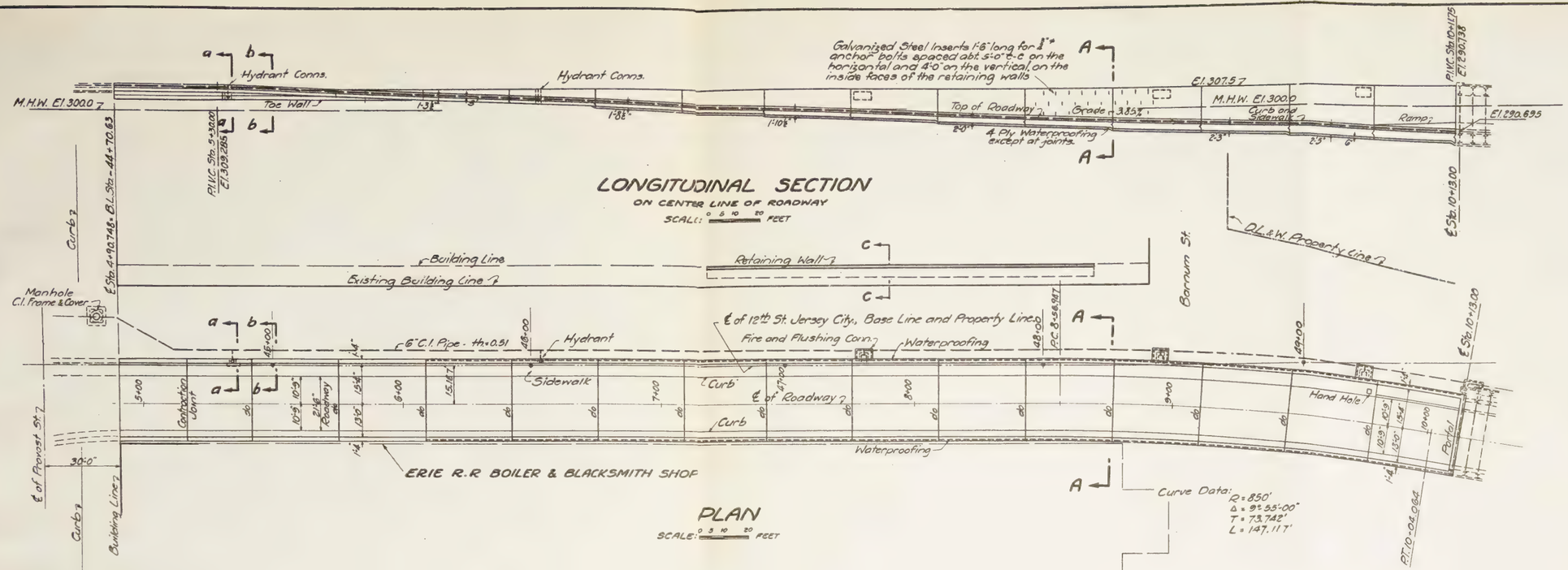
Ole Singstad
ENGINEER OF D

Allan Holland
CHIEF ENGINEER

DRAWN BY C.R.J.
CHECKED BY M.G. E.W.

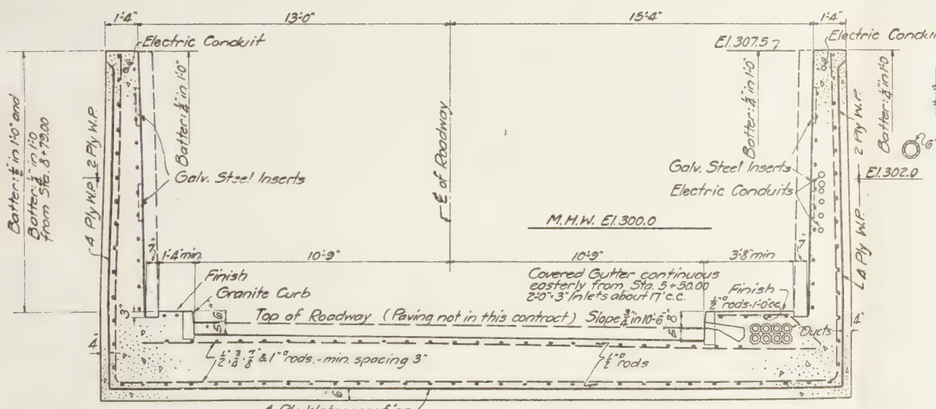
FILE NO. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y

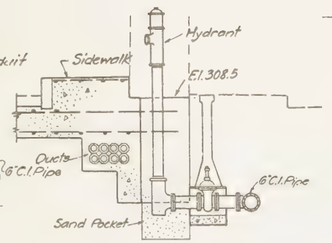


LONGITUDINAL SECTION
ON CENTER LINE OF ROADWAY
SCALE: 0 5 10 20 FEET

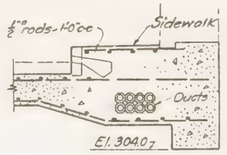
PLAN
SCALE: 0 5 10 20 FEET



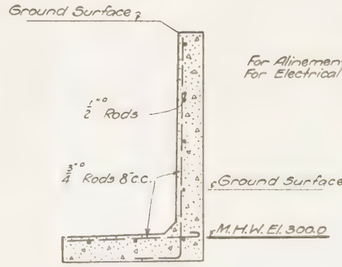
SECTION A-A
SCALE: 0 1 2 FEET



SECTION a-a
SCALE: 0 1 2 FEET



SECTION b-b
SCALE: 0 1 2 FEET



SECTION C-C
SCALE 0 1 2 FEET

For Alinement and Profile see Dwg. No. 1 File No. 1-6
For Electrical Conduit System " " - 27-30 " - 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

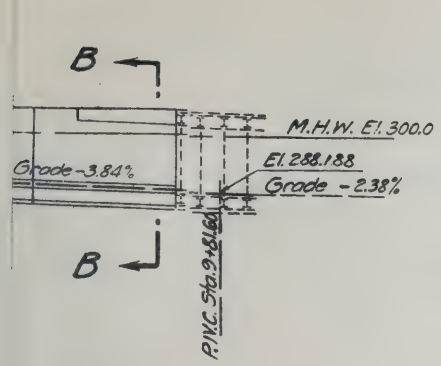
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 2

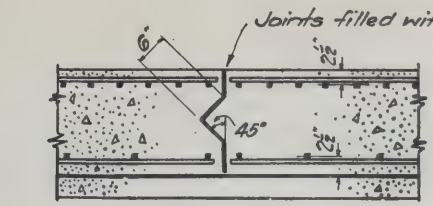
SOUTH TUNNEL - NEW JERSEY

Ole Singstad
ENGINEER OF DESIGNS.

SCALE: AS SHOWN
DATE: SEPTEMBER 10, 1924
DRAWN BY C.R.J.
CHECKED BY M.G. Fan.
CHIEF ENGINEER
FILE NO. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.

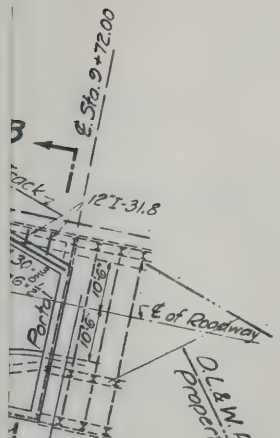


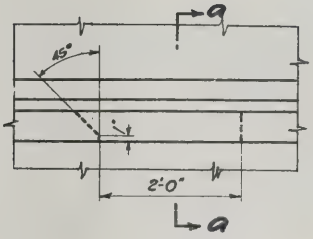


6 Ply Waterproofing
5'-0" (not to scale) 5'-0" (not to scale)

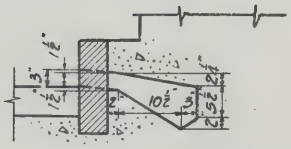
DETAIL OF CONTRACTION JOINTS

SCALE: 0 1 2 FEET





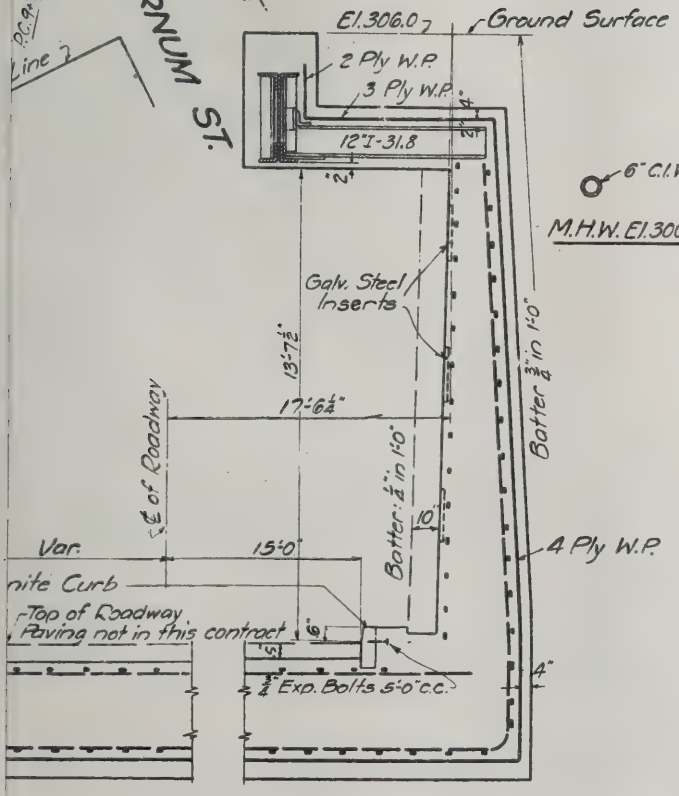
PLAN



SECTION a-a

DETAIL OF GUTTER INLETS OUTSIDE OF PORTAL

SCALE 0 1 2 FEET



For Alinement and Profile see Dwg. No. 1 File No. 1-6
For Electrical Conduit System " " -27-30 " " 1-6

B-B
FEET

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 3

SCALE: AS SHOWN

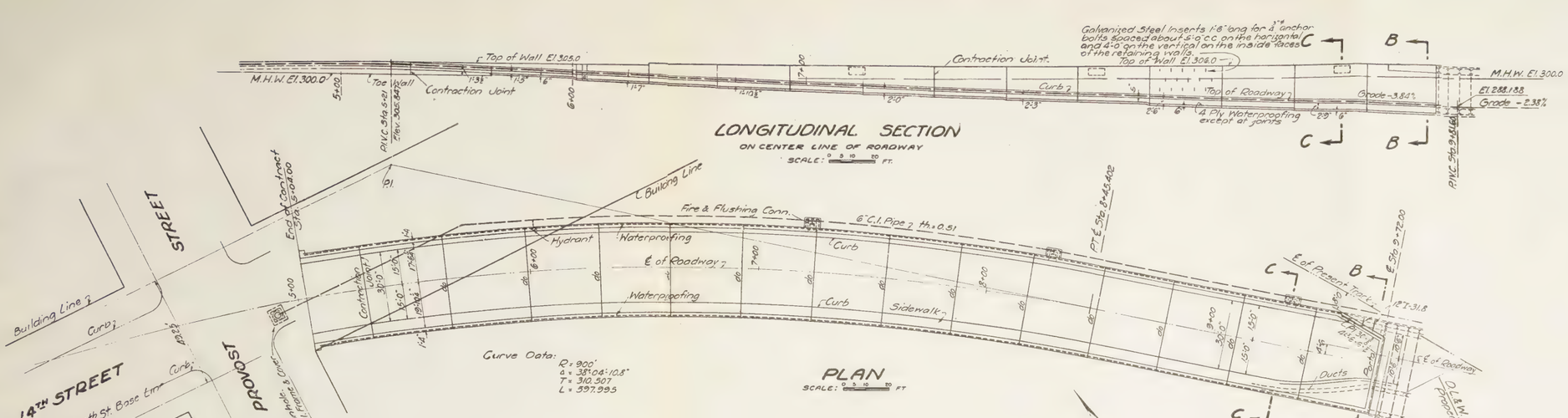
DATE: SEPTEMBER 10, 1924

CHIEF ENGINEER

DRAWN BY C.K.J.
CHECKED BY M.C. Ew.

FILE NO. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.



For Alinement and Profile see Dwg. No. 1 File No. 1-6
For Electrical Conduit System " " 27.30 " 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

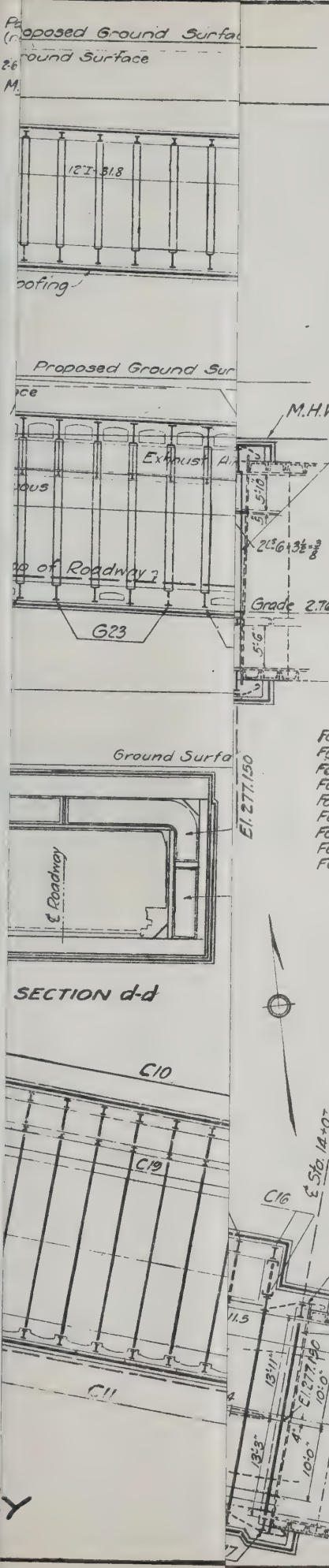
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 3

NORTH TUNNEL - NEW JERSEY

SCALE AS SHOWN
DATE: SEPTEMBER 10, 1924
DRAWN BY A.N.J.
CHECKED BY M.B. Lu
CHIEF ENGINEER
FILE NO. 1-6

ENGINEER OF DESIGNS

M. B. BROWN PRINTING & BINDING CO. N.Y.



For Alinement & Profile	see Dwg.	No. 1	File No.	1-6
For Sections F-F & G-G	"	" 9	"	1-6
For Interior Details	"	" 10	"	1-6
For Concrete Details	"	" 11-12	"	1-6
For High Tension Duct Splicing Chamber	"	" 13	"	1-6
For Niches and Manholes	"	" 14-15	"	1-6
For Exhaust Port Castings	"	" 16-17	"	1-6
For Girder and Column Schedules	"	" 26	"	1-6
For Electrical Conduit System	"	" 27-30	"	1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 4

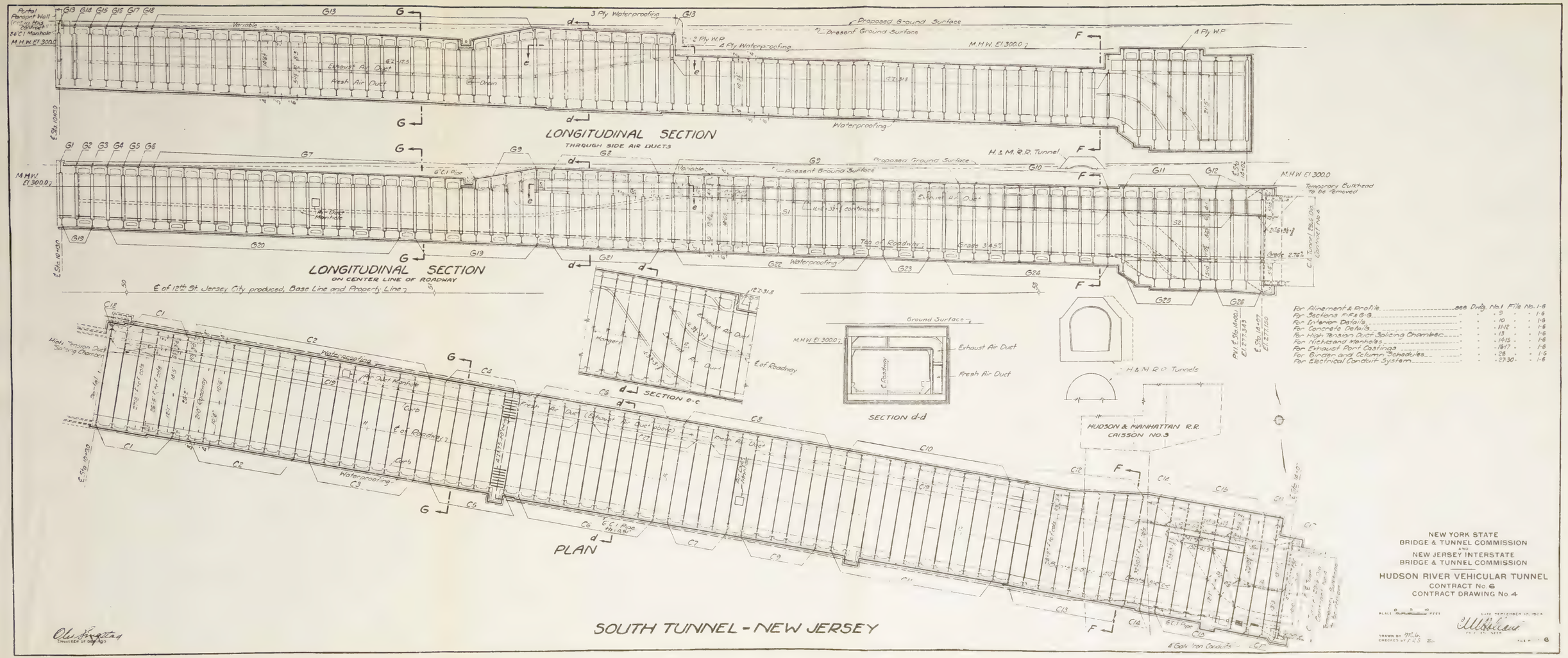
SCALE: 0 5 10 FEET

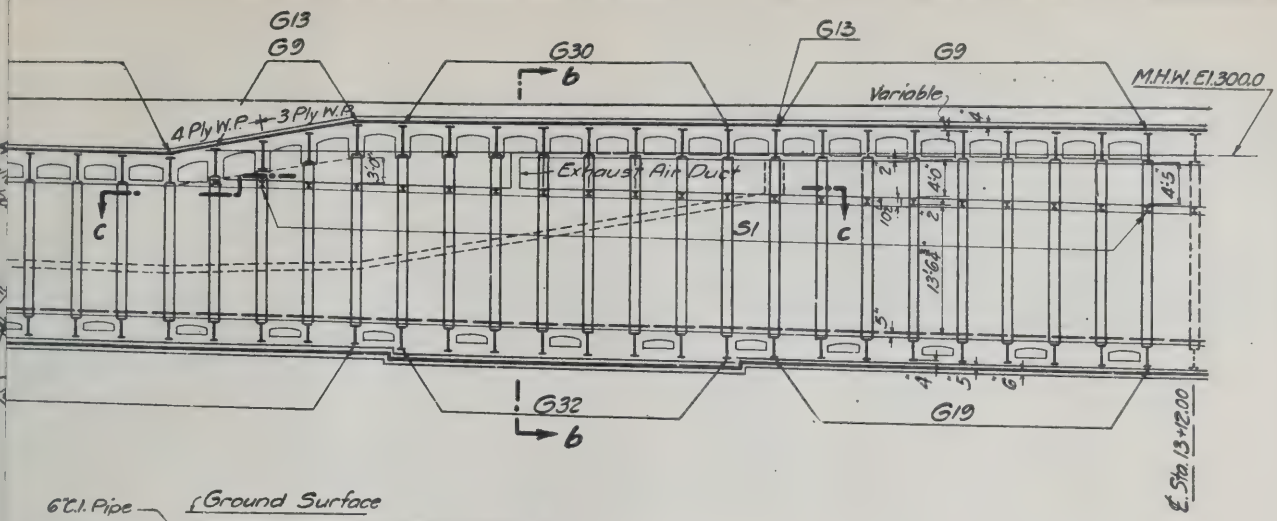
DATE: SEPTEMBER 10, 1924

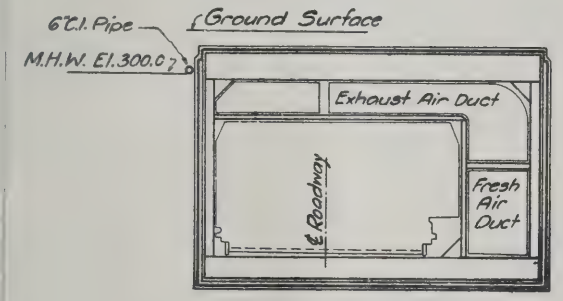
CHIEF ENGINEER

DRAWN BY M.G.
CHECKED BY C.R.S. E.W.

FILE NO. 1-6


LONGITUDINAL SECTION
THROUGH SIDE AIR DUCTS
LONGITUDINAL SECTION
ON CENTER LINE OF ROADWAY
℄ of 12th St. Jersey City produced, Base Line and Property Line
PLAN
SECTION e-e
SECTION d-d
Portal Parapet Wall (not in this contract)
8 C.I. Manholes
M.H.W. El. 300.0
Variable
Exhaust Air Duct
Fresh Air Duct
3 Ply Waterproofing
4 Ply Waterproofing
2 Ply W.P.
Proposed Ground Surface
Present Ground Surface
Waterproofing
H. & M. R.R. Tunnel
Temporary Bulkhead to be Removed
Air Duct Manhole
Hangers
Ground Surface
℄ Roadway
Curb
Grade 3.46%
Grade 2.76%
Tops of Roadway
Hudson Tension Duct Sealing Chamber
HUDSON & MANHATTAN R.R. CAISSON NO. 3
H. & M. R.R. Tunnels
4 Cast Iron Conduits
For Alinement & Profile ... see Dwg. No. 1 File No. 1-6
For Sections F-F & G-G ... " 9 " 1-6
For Interior Details ... " 10 " 1-6
For Concrete Details ... " 11-12 " 1-6
For High Tension Duct Sealing Chamber ... " 13 " 1-6
For Nichesand Manholes ... " 14-15 " 1-6
For Exhaust Port Castings ... " 16-17 " 1-6
For Girder and Column Schedules ... " 28 " 1-6
For Electrical Conduit System ... " 27-30 " 1-6
NEW YORK STATE BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE BRIDGE & TUNNEL COMMISSION
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 4
SOUTH TUNNEL - NEW JERSEY
Ole Singstad
ENGINEER OF DESIGN

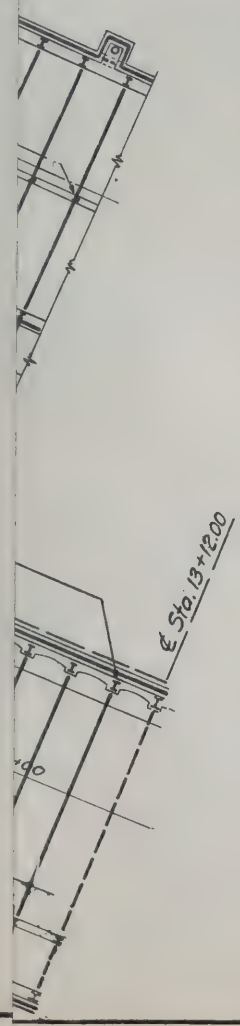




SECTION · b-b

General Notes:
Bents 5'-0" ctrs on ℄ of roadway & radial.

For Alinement & Profile	see	Dwg.	No. 1	File	No. 1-6
For Section G-G	"	"	" 9	"	" 1-6
For Interior Details	"	"	" 10	"	" 1-6
For Concrete Details	"	"	" 11-12	"	" 1-6
For High Tension Duct Splicing Chamber	"	"	" 13	"	" 1-6
For Niches and Manholes	"	"	" 14-15	"	" 1-6
For Exhaust Port Castings	"	"	" 16-17	"	" 1-6
For Girder & Column Schedules	"	"	" 26	"	" 1-6
For Electrical Conduit System	"	"	" 27-30	"	" 1-6



NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 5

SCALE: 0 5 10 FEET

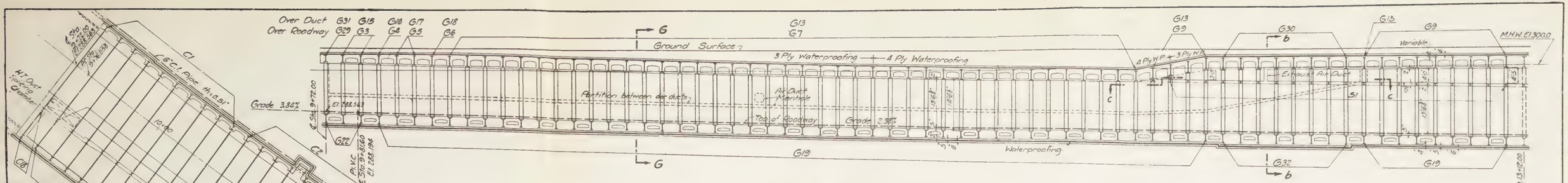
DATE: SEPTEMBER 10, 1924

CHIEF ENGINEER

DRAWN BY M.B.
CHECKED BY L.R.S. Jr.

FILE No. 1-6

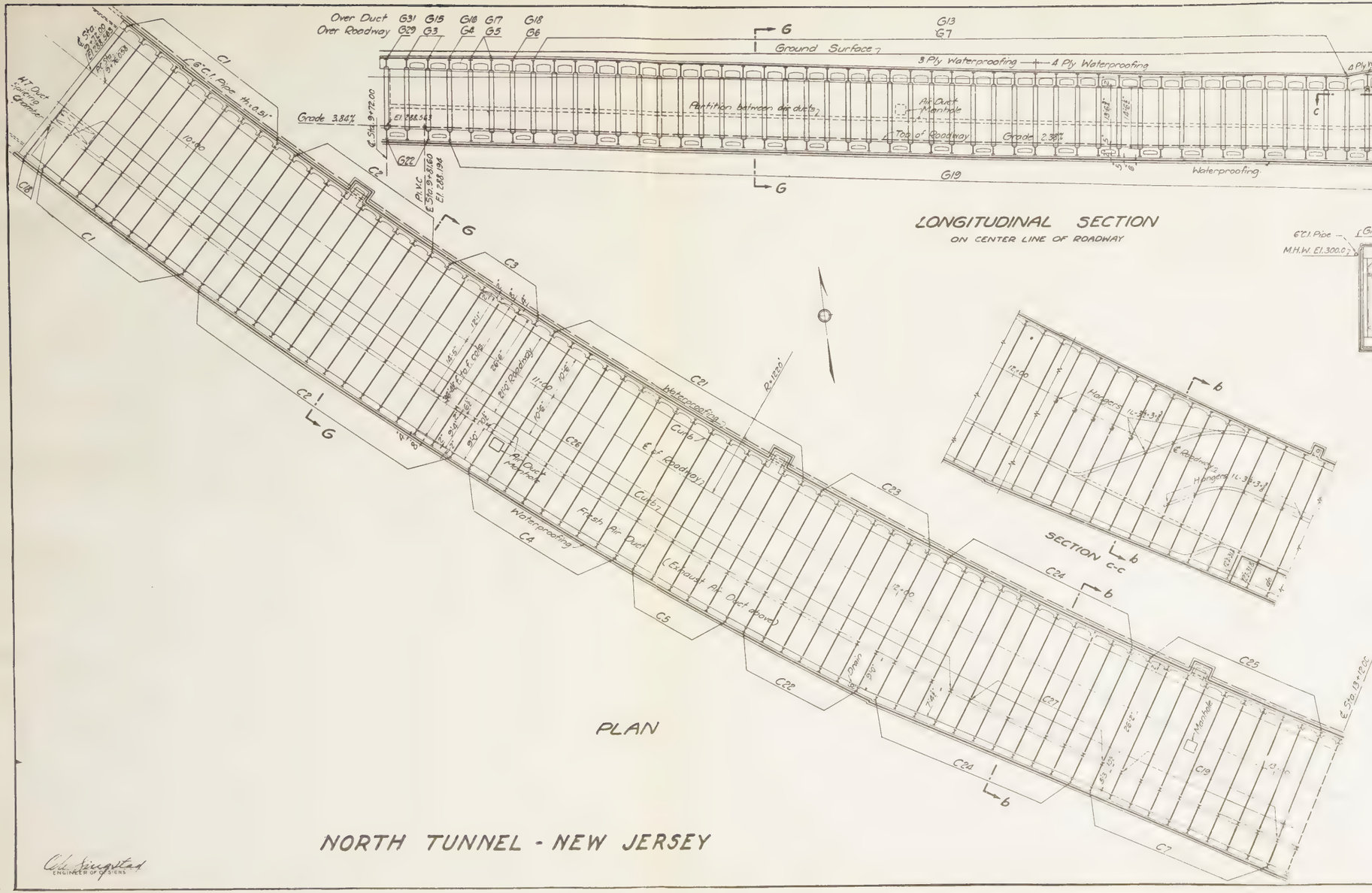
M. B. BROWN PRINTING & BINDING CO., N. Y.



LONGITUDINAL SECTION
ON CENTER LINE OF ROADWAY

SECTION b-b

General Notes:
Bents 5'-0" c'ts on ℄ of roadway & radial.



PLAN

SECTION c-c

For Alinement & Profile	see Dwg. No.	1	File No. 1-6
For Section G-G	" "	9	" 1-6
For Interior Details	" "	10	" 1-6
For Concrete Details	" "	11-12	" 1-6
For High Tension Duct Splicing Chamber	" "	13	" 1-6
For Niches and Manholes	" "	14-15	" 1-6
For Exhaust Port Castings	" "	16-17	" 1-6
For Girder & Column Schedules	" "	26	" 1-6
For Electrical Conduit System	" "	27-30	" 1-6

NORTH TUNNEL - NEW JERSEY

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 5

SCALE: 0 5 10 FEET

DATE: SEPTEMBER 10, 1924

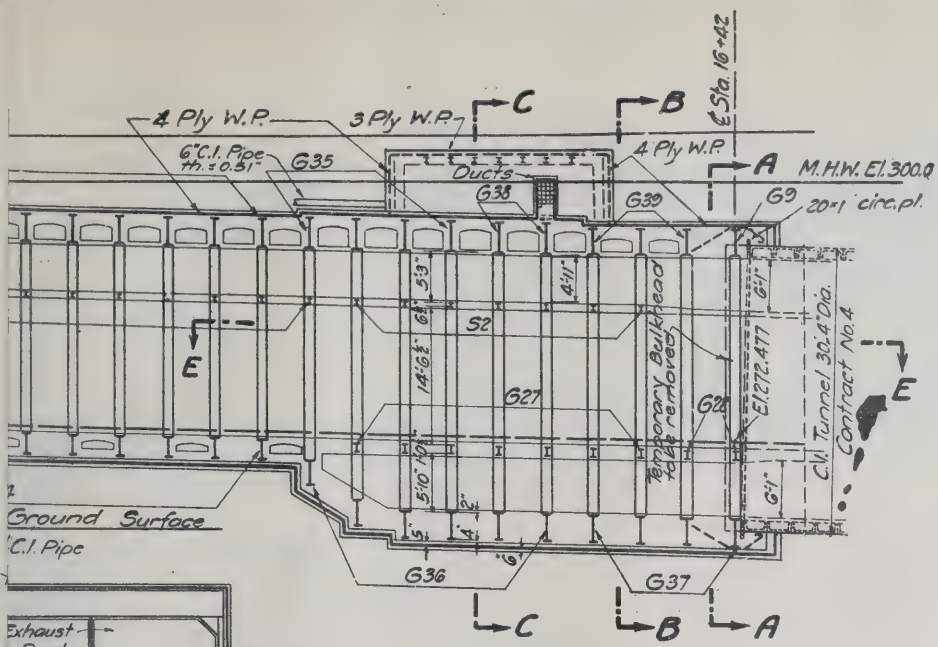
Ole Singstad
ENGINEER OF DESIGNS

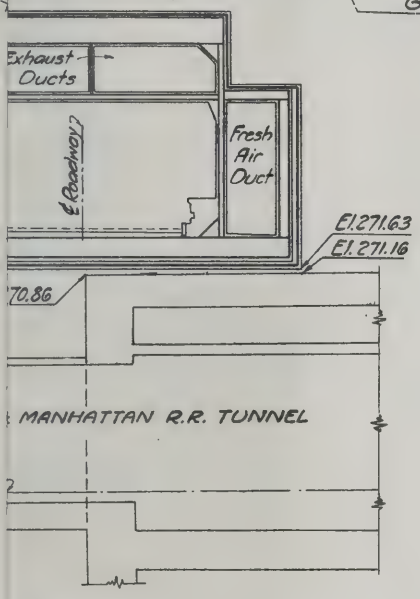
CHIEF ENGINEER

DRAWN BY M.L.
CHECKED BY L.K.J.

FILE No. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.

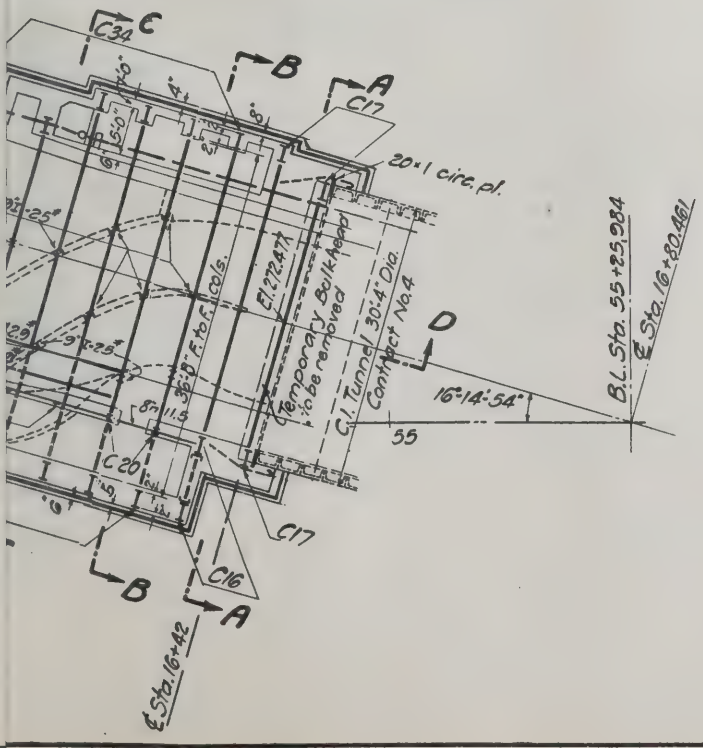




SECTION a-a

General Notes:
Bents 5'-0" ctr's on ℄ of roadway & radial.

For Alinement and Profile	see Dwg. No.	1	File No.	1-6
For Sections A-A, B-B and C-C	" "	7	" "	1-6
For Sections D-D and E-E	" "	8	" "	1-6
For Section F-F	" "	9	" "	1-6
For Interior Details	" "	10	" "	1-6
For Concrete Details	" "	11-12	" "	1-6
For High Tension Duct Splicing Chamber	" "	13	" "	1-6
For Niches and Manholes	" "	14-15	" "	1-6
For Exhaust Port Castings	" "	16-17	" "	1-6
For Girder and Column Schedules	" "	26	" "	1-6
For Electrical Conduit System	" "	27-30	" "	1-6



NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 6

SCALE: 0 5 10 FEET

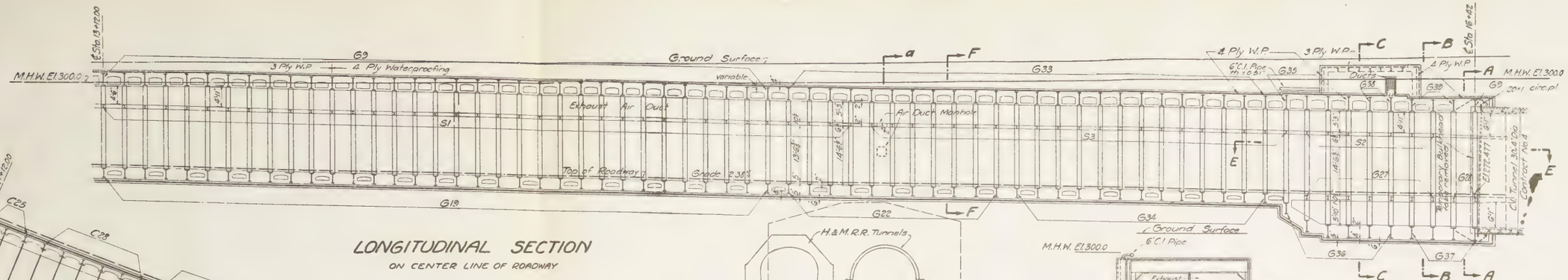
DATE: SEPTEMBER 10, 1924

CHIEF ENGINEER

DRAWN BY M.L.
CHECKED BY C.R.S. E.W.

FILE NO. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.

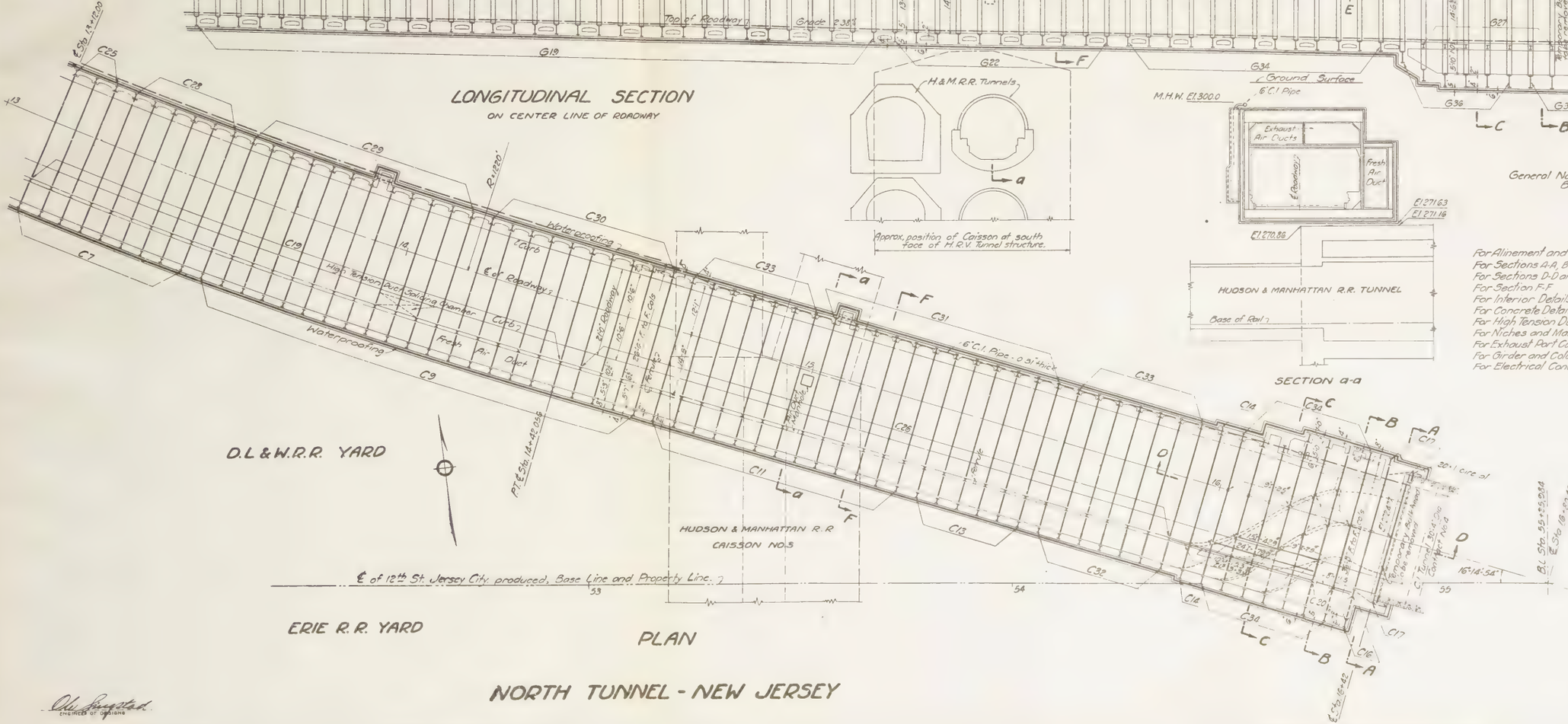


LONGITUDINAL SECTION
ON CENTER LINE OF ROADWAY

SECTION a-a

General Notes:
Bents 5'-0" ctrs on ℄ of roadway & radial

For Alinement and Profile	see Drg. No.	1	File No. 1-G
For Sections A-A, B-B and C-C	" "	7	" " 1-G
For Sections D-D and E-E	" "	8	" " 1-G
For Section F-F	" "	9	" " 1-G
For Interior Details	" "	10	" " 1-G
For Concrete Details	" "	11-12	" " 1-G
For High Tension Duct Splicing Chamber	" "	13	" " 1-G
For Niches and Manholes	" "	14-15	" " 1-G
For Exhaust Port Castings	" "	16-17	" " 1-G
For Girder and Column Schedules	" "	26	" " 1-G
For Electrical Conduit System	" "	27-30	" " 1-G



PLAN

NORTH TUNNEL - NEW JERSEY

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 6

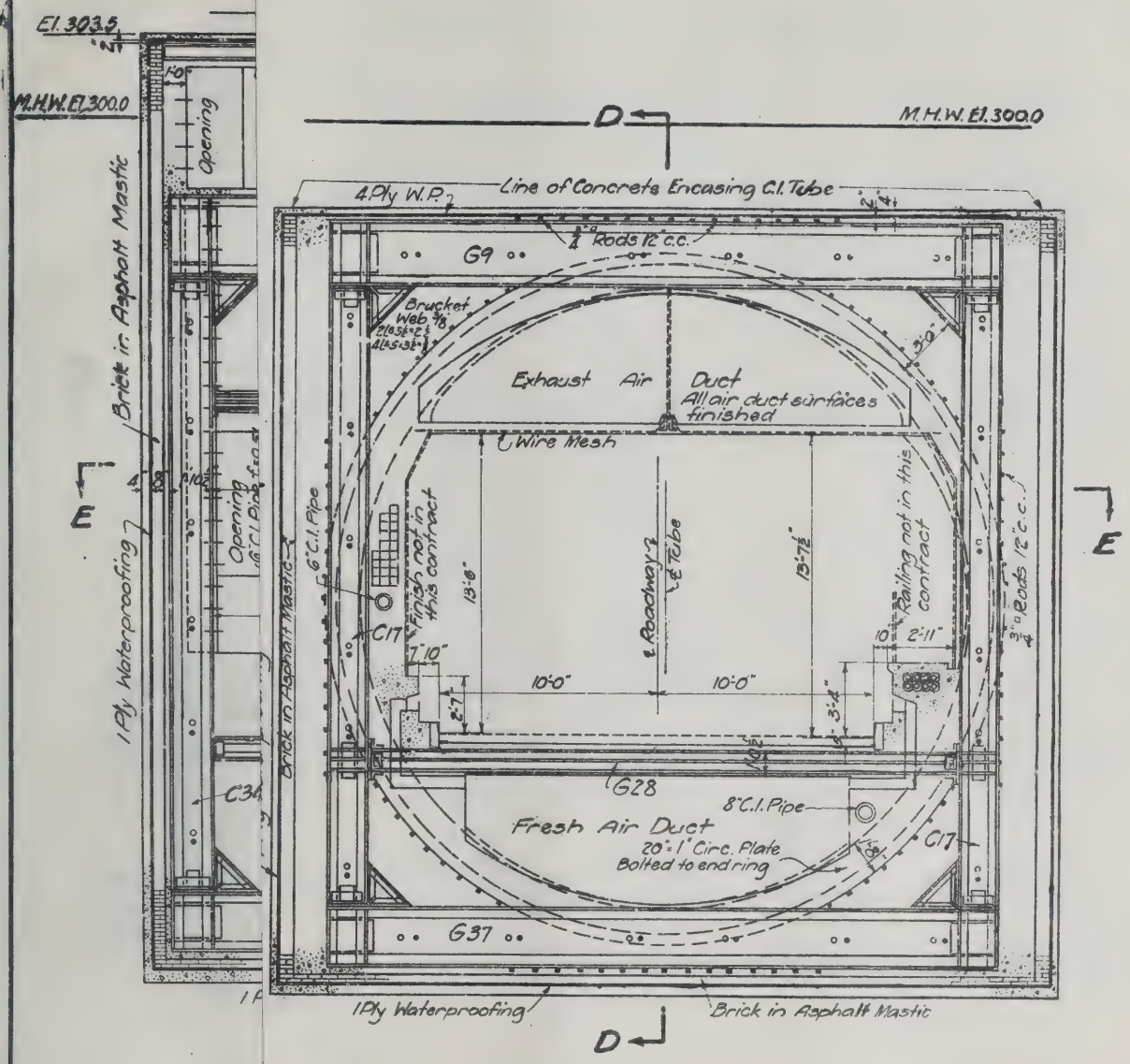
SCALE 0 5 10 FEET — DATE: SEPTEMBER 15, 1934

DRAWN BY M.L. CHECKED BY R.J. — CHIEF ENGINEER

FILE NO. 1-G

Ole Singstad
ENGINEER OF DESIGN

M. B. BROWN PRINTING & BINDING CO., N. Y.



SECTION A-A

vg. No.	1	File No.		1-6
"	6	"	"	1-6
"	8	"	"	1-6
"	10	"	"	1-6
gs. "	11-12	"	"	1-6
ig. "	26	"	"	1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 7

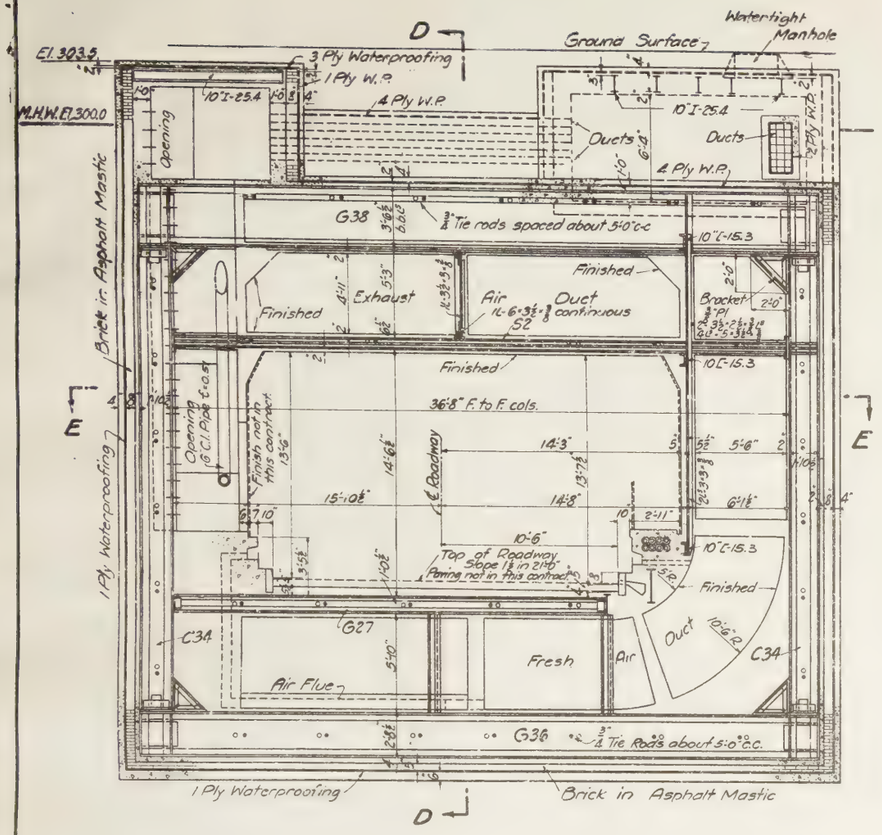
SCALE: 0 1 2 3 4 FEET.

DATE: SEPTEMBER 10, 1924

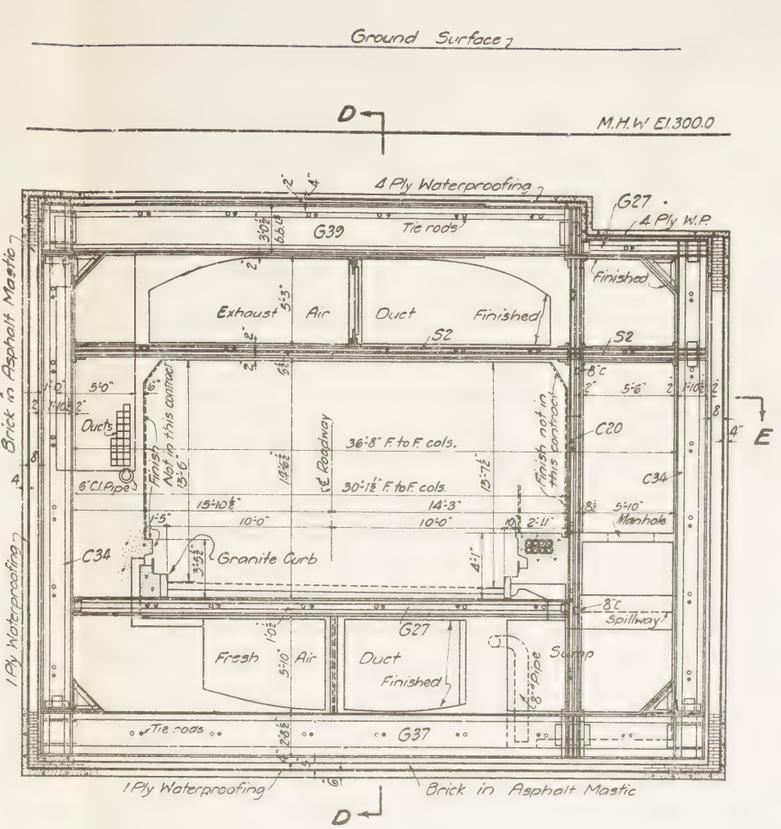
C. M. Holland
CHIEF ENGINEER

DRAWN BY L.R.J.
CHECKED BY M.C. E.W.

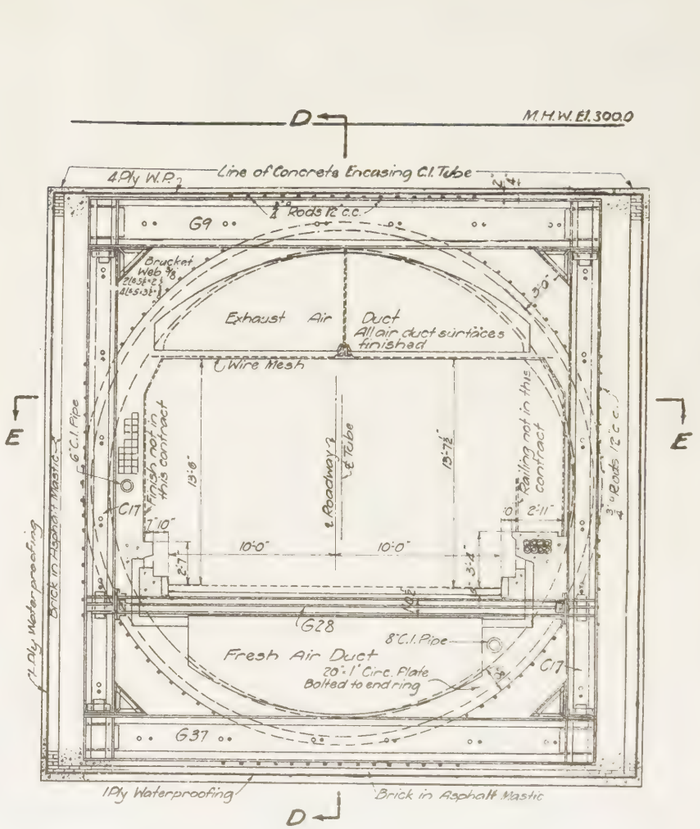
FILE NO. 1-6



SECTION C-C



SECTION B-B



SECTION A-A

For Alinement and Profile	see	Dwg.	No.	1	File	No. 1-6
For Plan and Longitudinal Section	"	"	"	6	"	" 1-6
For Sections D-D and E-E	"	"	"	8	"	" 1-6
For Interior Details	"	"	"	10	"	" 1-6
For Concrete Details	"	Dwgs.	"	11-12	"	" 1-6
For Girder and Column Schedules	"	Dwg.	"	26	"	" 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 7

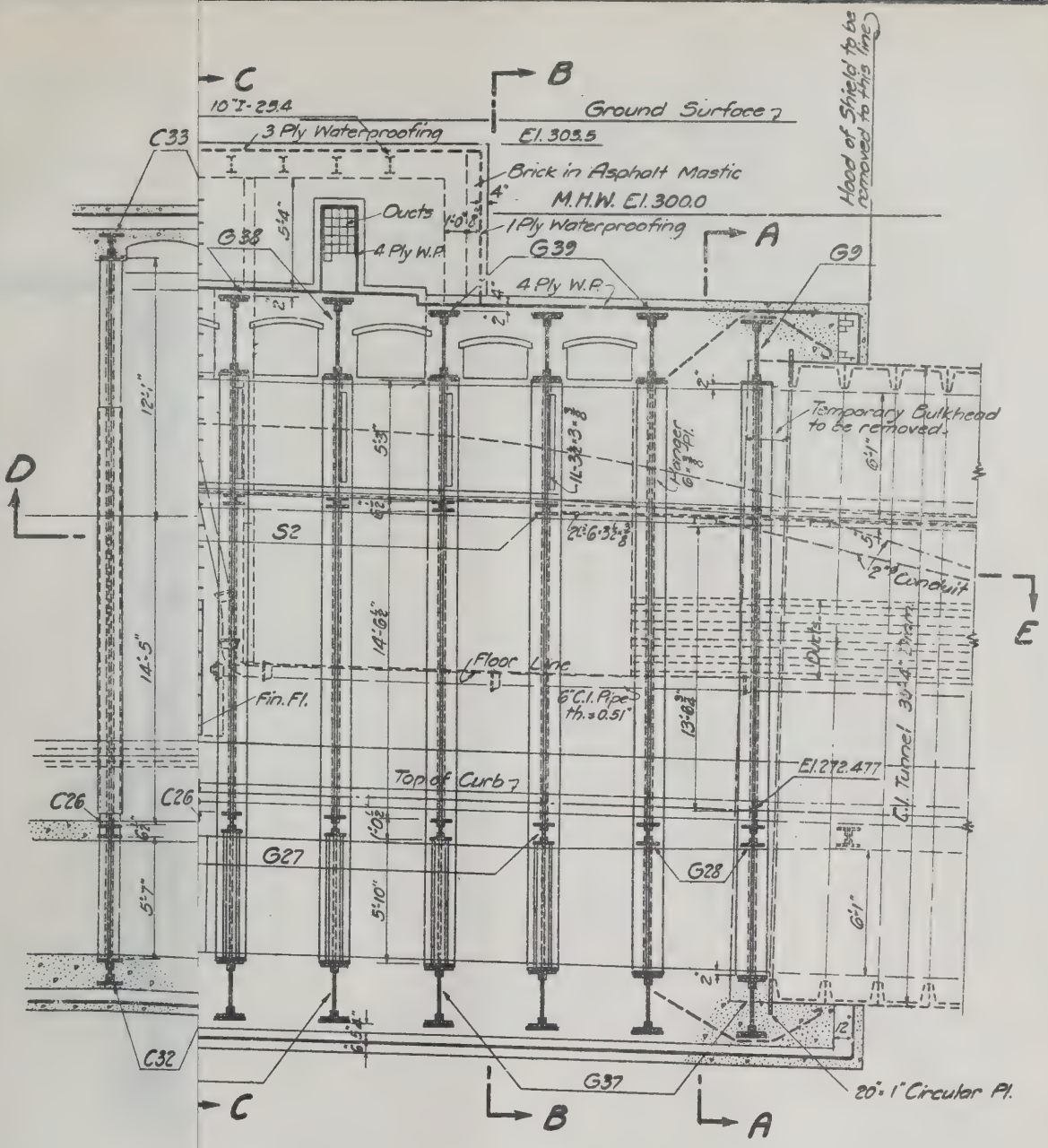
SCALE: 0 1 2 3 4 FEET.

DATE: SEPTEMBER 19, 1934

CHIEF ENGINEER

DRAWN BY A.R.J.
CHECKED BY M.C. Bell

FILE NO. 1-6



SECTION D-D

SCALE: 0 1 2 3 4 FEET

No	1	File No.	1-6
"	6	" "	1-6
"	7	" "	1-6
"	10	" "	1-6
"	11-12	" "	1-6
"	26	" "	1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 8

SCALE: AS SHOWN

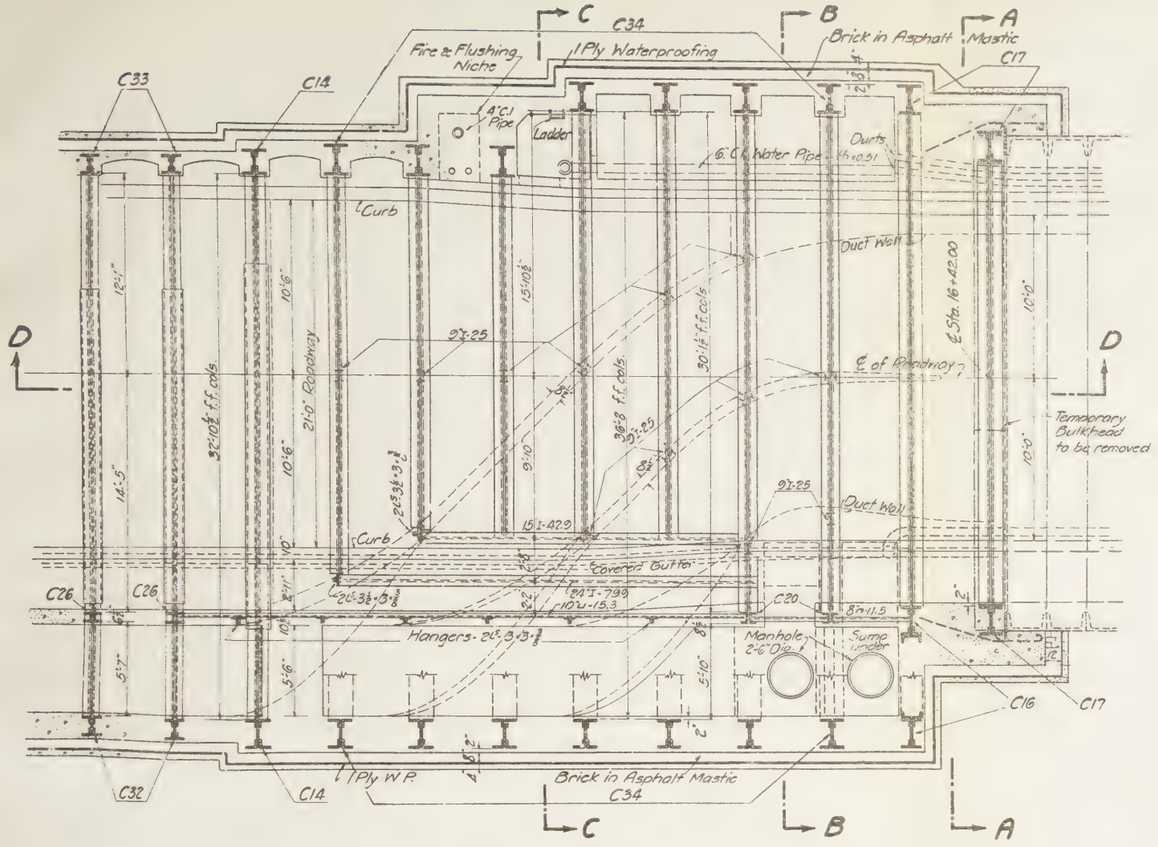
DATE: SEPTEMBER 10, 1924.

CHIEF ENGINEER

ENGINEER OF DE

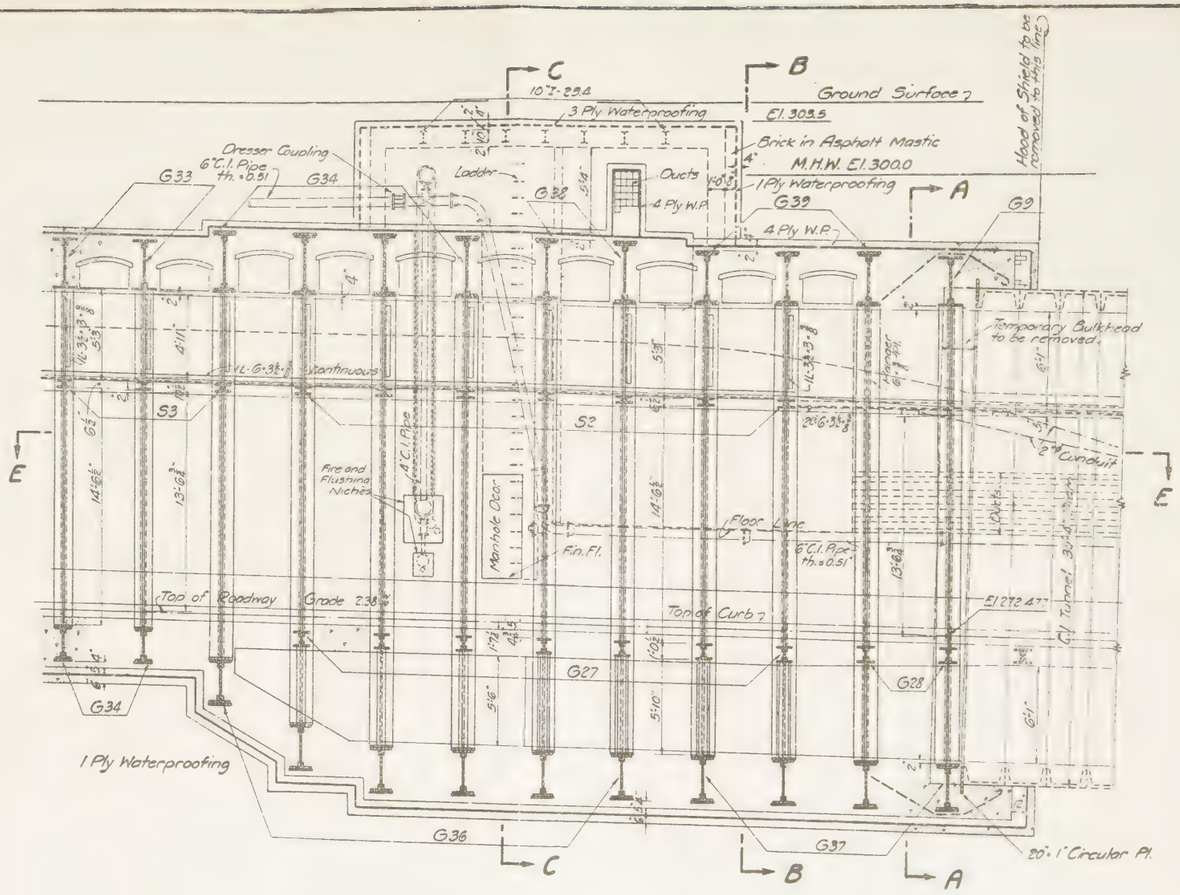
DRAWN BY L. R. S.
CHECKED BY M. B. Lu.

FILE NO. 1-6



SECTION E-E

SCALE: 0 1 2 3 4 FEET



SECTION D-D

SCALE: 0 1 2 3 4 FEET

For Alinement and Profile	see Dwg. No.	1	File No.	1-6
For Plan and Longitudinal Section	" "	6	" "	1-6
For Sections A-A, B-B and C-C	" "	7	" "	1-6
For Interior Details	" "	10	" "	1-6
For Concrete Details	" Dwgs.	11-12	" "	1-6
For Girder and Column Schedules	" Dwg.	26	" "	1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 8

SCALE: AS SHOWN

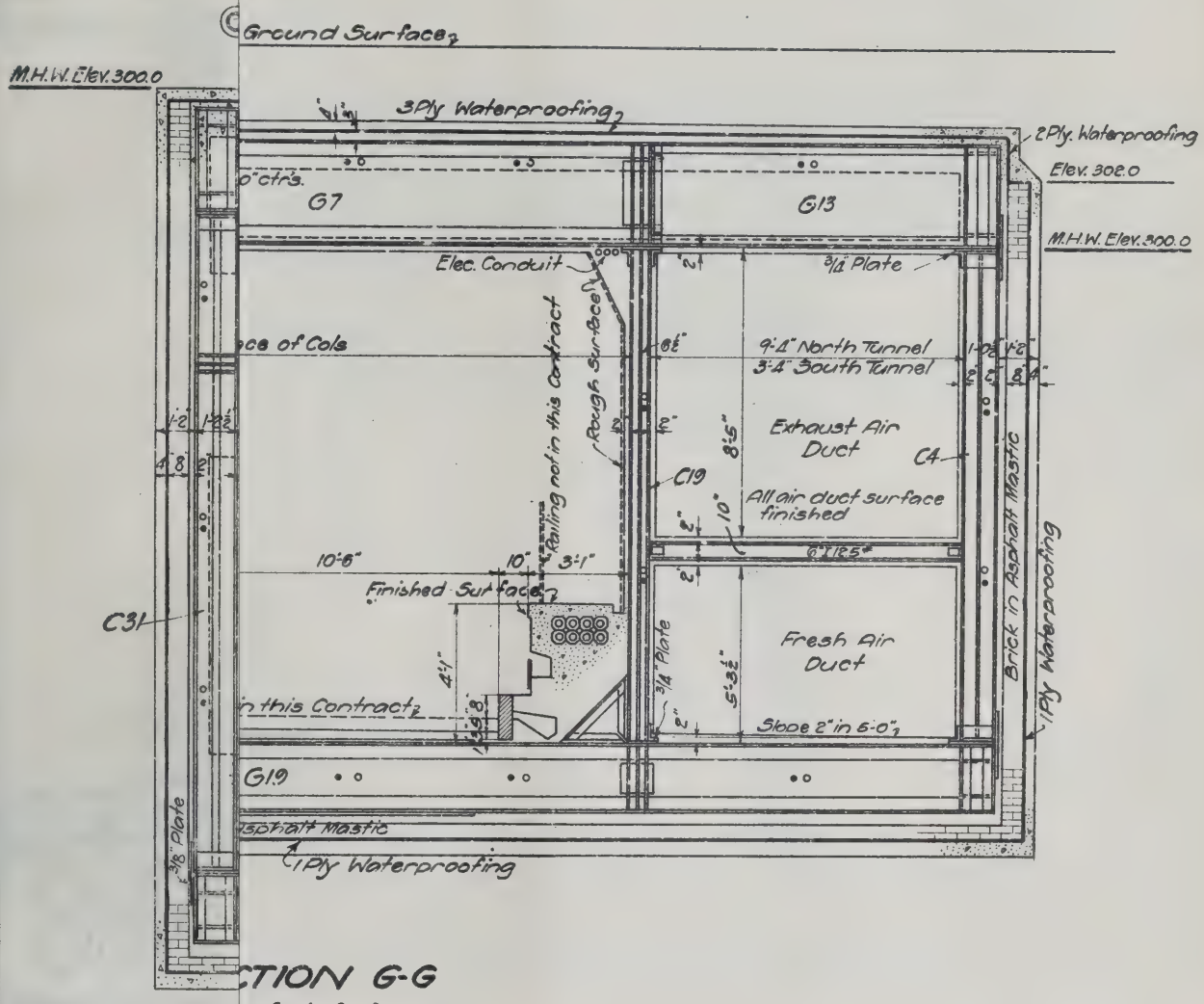
DATE: SEPTEMBER 10, 1924

DRAWN BY L.R.J.
CHECKED BY M.G. Sp.

O. H. Ammann
ENGINEER OF DESIGNS

O. H. Holland
CHIEF ENGINEER

FILE NO. 1-8



CTION G-G

E: 0 1 2 3 FEET

Dwg. No. 1	File No. 1-6		
Dwgs. " 4-6	"	"	1-6
Dwg. " 10	"	"	1-6
Dwgs. " 11-12	"	"	1-6
Dwg " 26	"	"	1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 9

SCALE: AS SHOWN

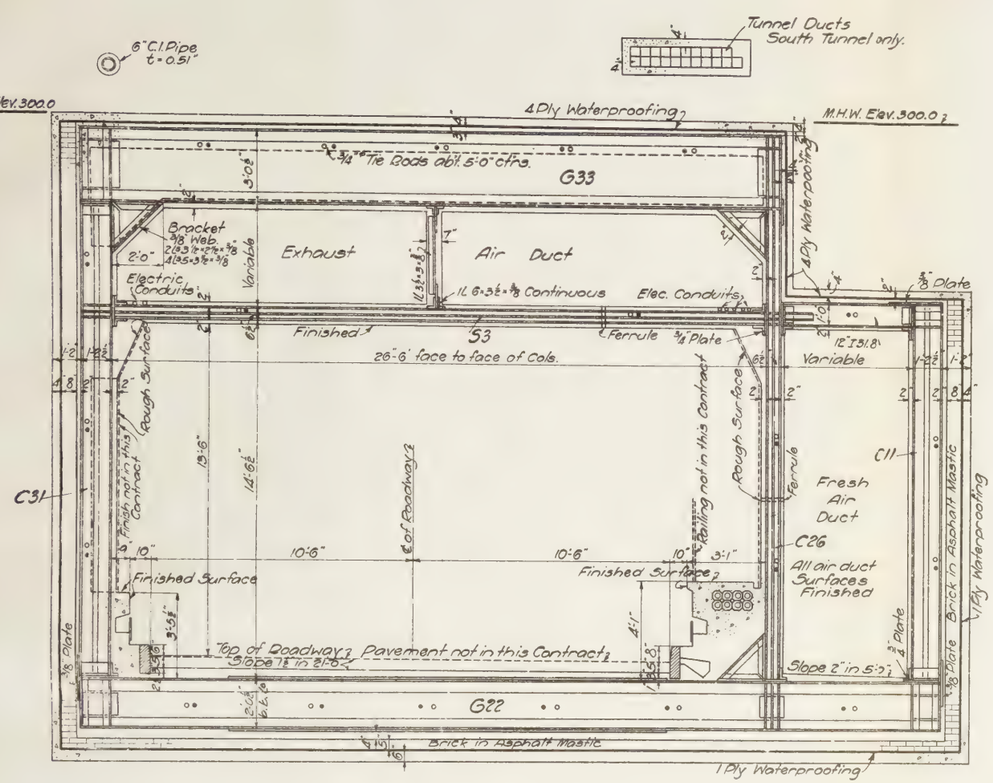
DATE: SEPTEMBER 10, 1924

ENGINEER OF

CHIEF ENGINEER

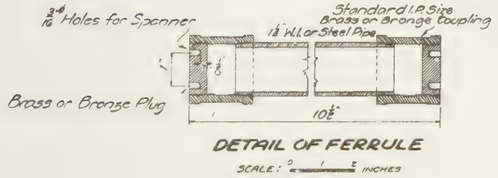
DRAWN BY M.C.
CHECKED BY L.R.J. T.W.

FILE NO. 145



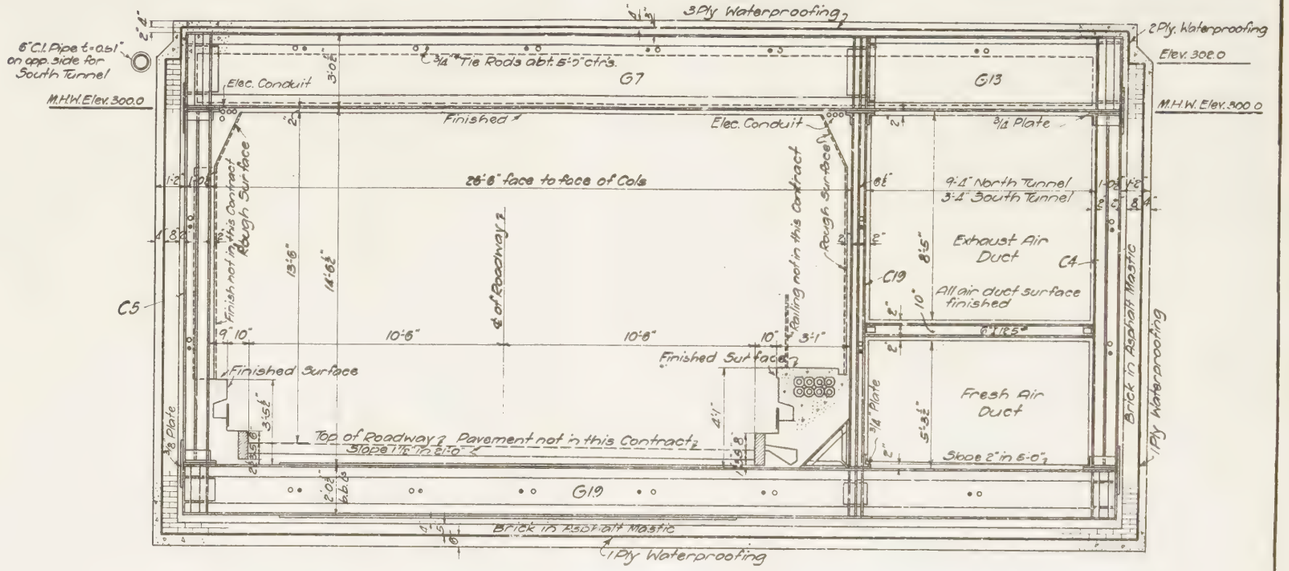
SECTION F F

SCALE: 0 1 2 3 FEET



DETAIL OF FERRULE

SCALE: 0 1 2 INCHES



SECTION G-G

SCALE: 0 1 2 3 FEET

For Alinement and Profile	see Dwg. No.	1	File No.	1-6
For Plan and Longitudinal Sections	" Dwgs. "	4-6	" "	1-6
For Interior Details	" Dwg. "	10	" "	1-6
For Concrete Details	" Dwgs. "	11-12	" "	1-6
For Girder and Column Schedules	" Dwg "	26	" "	1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 9

SCALE: AS SHOWN

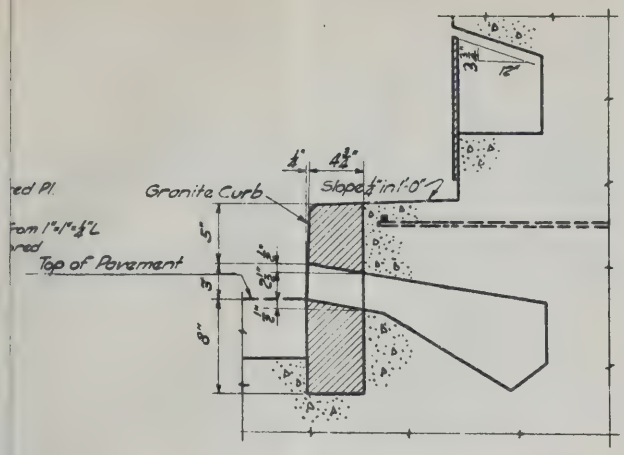
DATE: SEPTEMBER 10, 1926

DRAWN BY M. S.
CHECKED BY L. R. W. Rev.

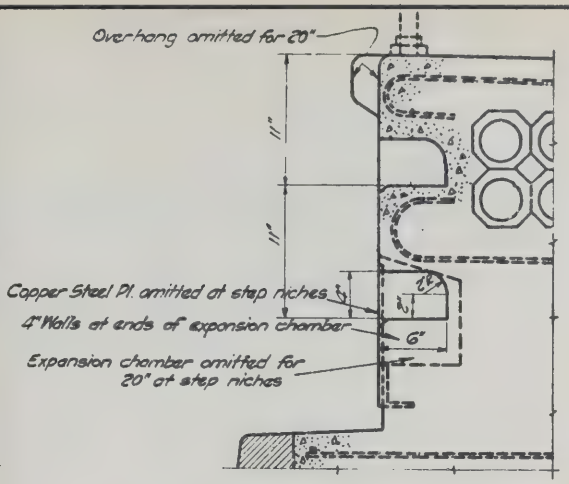
CHIEF ENGINEER

ENGINEER OF DESIGNS

FILE NO 1-6

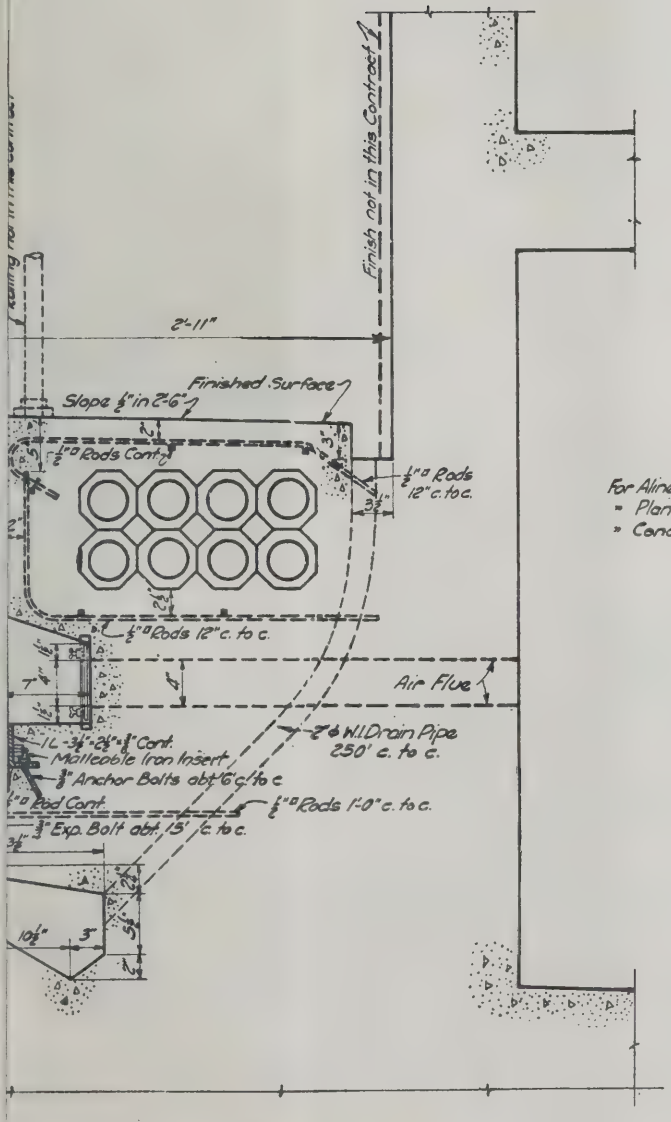


CROSS SECTION AT GUTTER INLET

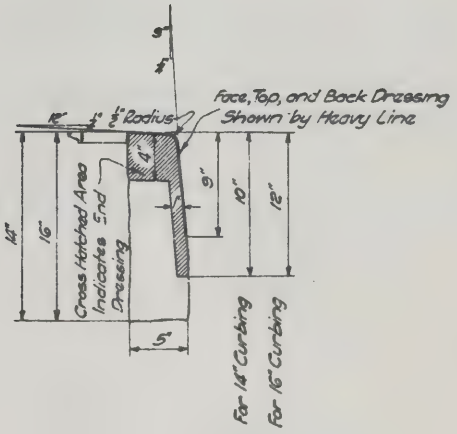

Overhang omitted for 20"
Copper Steel Pl. omitted at step niches
4" Walls at ends of expansion chamber
Expansion chamber omitted for 20" at step niches

CROSS SECTION AT STEP NICHES

Step Niches spaced every 240'



TION AT SIDEWALK



CURB DRESSING

For Alinement and Profile see Dwg. No. 1, File No. 1-6.
" Plan and Sections " Dwgs. Nos. 4-9 " " ".
" Concrete Details " " " 11-12 " " ".

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 10

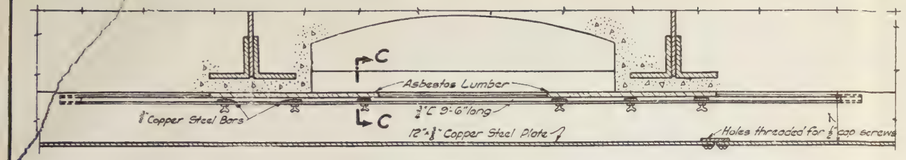
SCALE: 0 3 6 9 12 INCHES DATE: SEPTEMBER 10, 1924

CHIEF ENGINEER

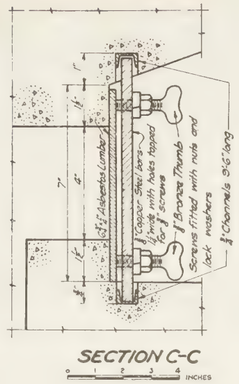
DRAWN BY AHG.
CHECKED BY GW.

FILE NO. 1-6

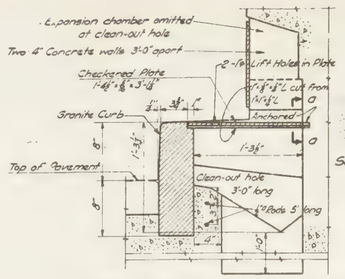
M. B. BROWN PRINTING & BINDING CO., N. Y.



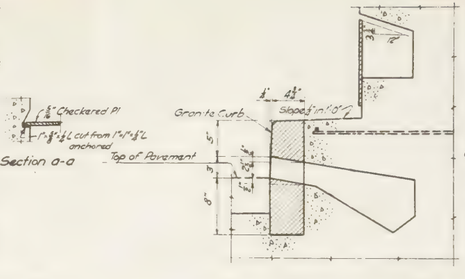
SECTION B-B


Copper Steel bar 2" long with holes tapped for ⅜" screws
⅜" Bronze Thumb Screws fitted with nuts and lock washers
3"×6" Channels 9'-6" long
6½"×4" Asbestos Lumber
INCHES

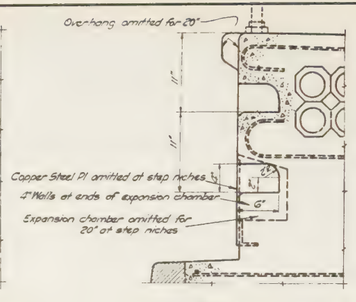
SECTION C-C



CROSS SECTION AT CLEAN-OUT HOLE

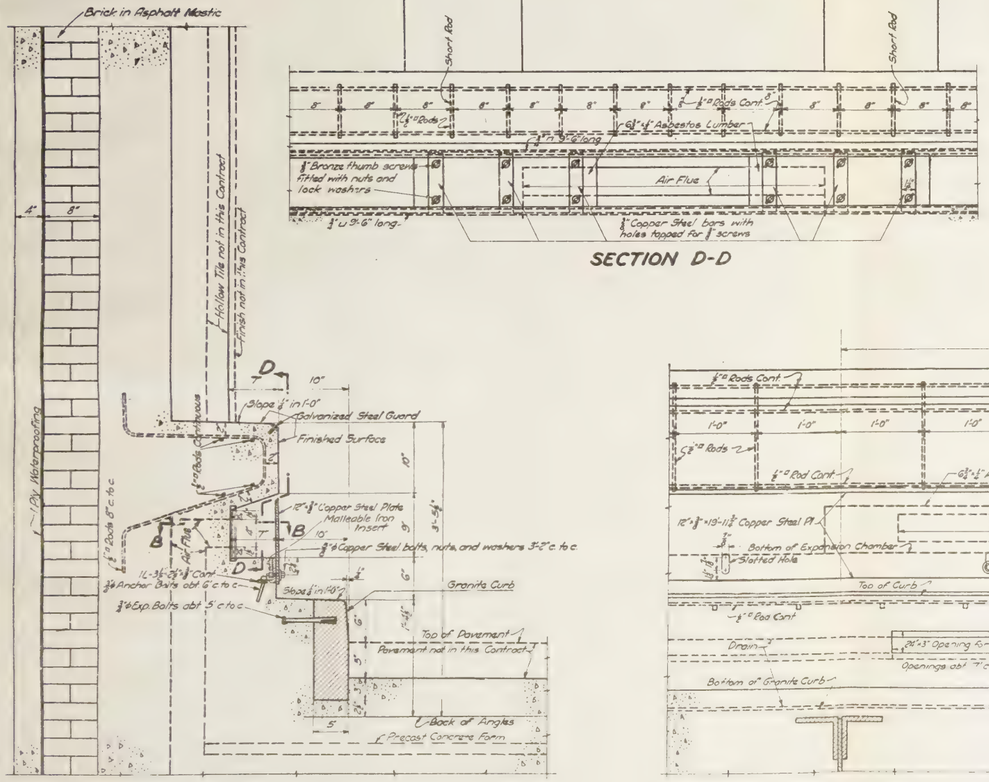


CROSS SECTION AT GUTTER INLET


Overhang omitted for 20"
Copper Steel Pl omitted at step niches
4" Walls at ends of expansion chamber
Expansion chamber omitted for 20" at step niches

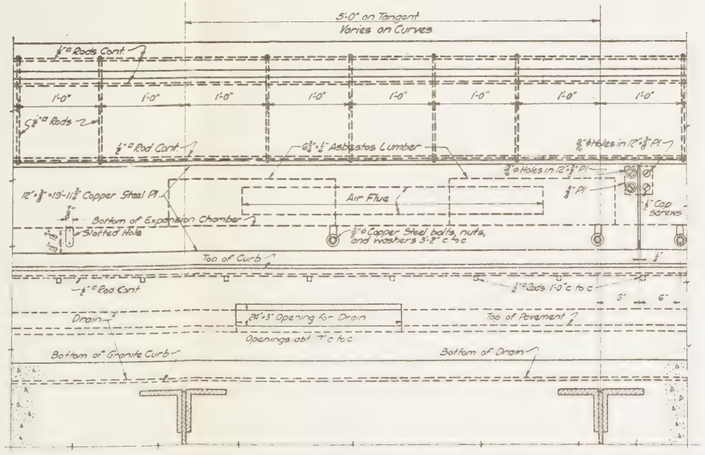
CROSS SECTION AT STEP NICHES

Step Niches spaced every 240'

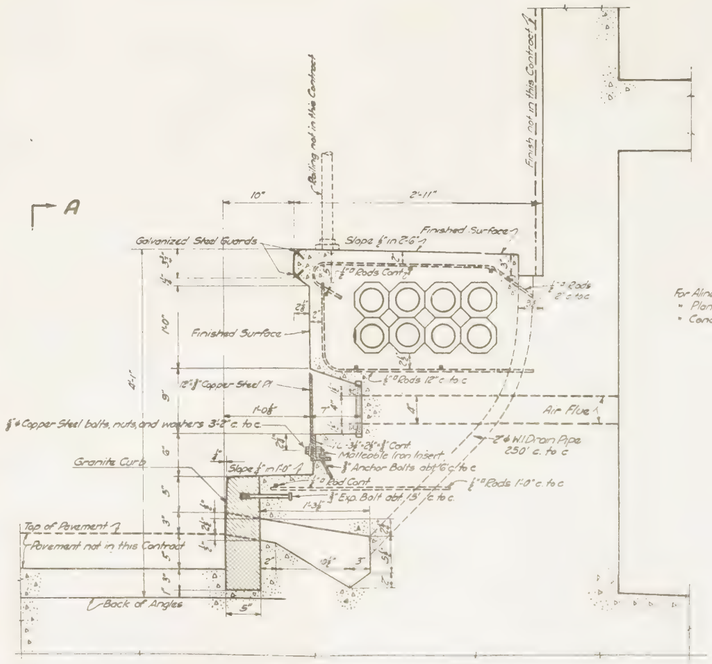

Brick in Asphalt Mastic
Short Rod
Air Flue
¾" Bronze thumb screws fitted with nuts and lock washers
¾" Copper Steel bars with holes tapped for ⅜" screws
Ply Waterproofing
Hollow Tile not in this Contract
Finish not in this Contract
Slope ¼" in 1'-0"
Galvanized Steel Guard
Finished Surface
12"×⅜" Copper Steel Plate
Malleable Iron Insert
¾" Copper Steel bolts, nuts, and washers 3'-2" c. to c.
Granite Curb
Top of Pavement
Pavement not in this Contract
Back of Angles
Precast Concrete Form

SECTION D-D

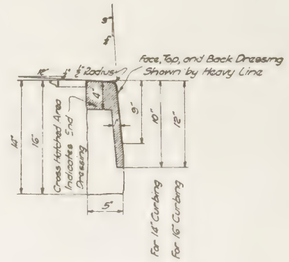
CROSS SECTION AT SIDE OPPOSITE SIDEWALK



SECTION A-A


Railing not in this Contract
Finish not in this Contract
Galvanized Steel Guards
Slope ¾" in 2'-6"
Finished Surface
Air Flue
¾" Copper Steel bolts, nuts, and washers 3'-2" c. to c.
2"ø W.I. Drain Pipe 250' c. to c.
Granite Curb
Top of Pavement
Pavement not in this Contract
Back of Angles

CROSS SECTION AT SIDEWALK


Face, Top, and Back Dressing Shown by Heavy Line
Cross Hatched Area Indicates Stone Dressing
For 14" Curbing
For 16" Curbing

CURB DRESSING

For Alinement and Profils see Dwg. No. 1 , File No. 1-G.
" Plan and Sections " Dwgs. Nos. 4-9 " " " .
" Concrete Details " " " 11-12 " " " .

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 10

SCALE 0 3 6 9 12 INCHES

DATE: SEPTEMBER 10, 1924

CHIEF ENGINEER

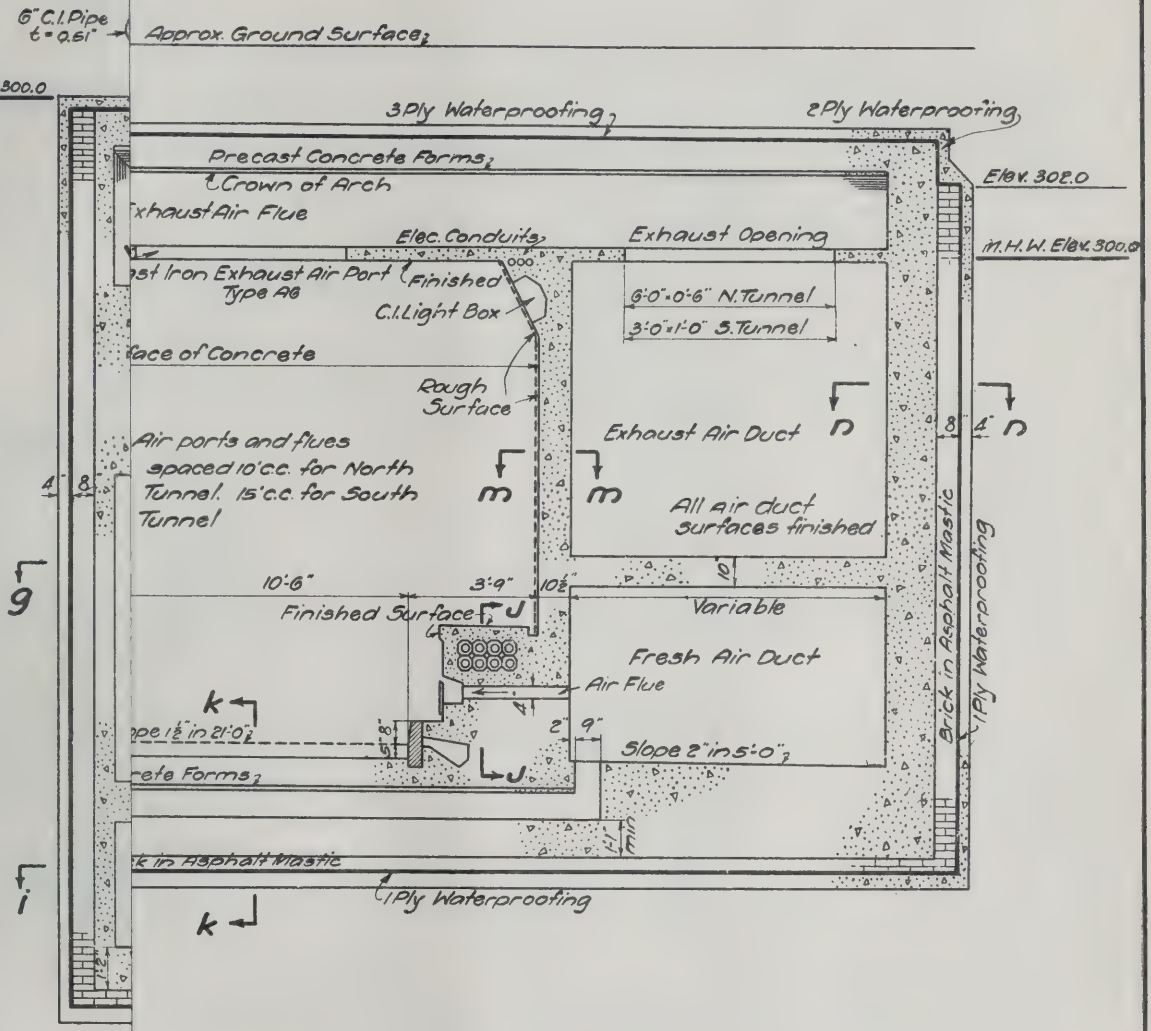
DRAWN BY JHB
CHECKED BY GL

FILE No. 1-G

INTERIOR DETAILS

ENGINEER OF DESIGNS

BROWN PRINTING & BINDING CO. N. Y.



...N-AIR DUCTS ON SIDE

...H & SOUTH TUNNELS

...Dwg. No. 1 File No. 1-6
... " 4-9 " " 1-6
... " 10 " " 1-6
... " 12 " " 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 11

SCALE: 0 1 2 3 FEET

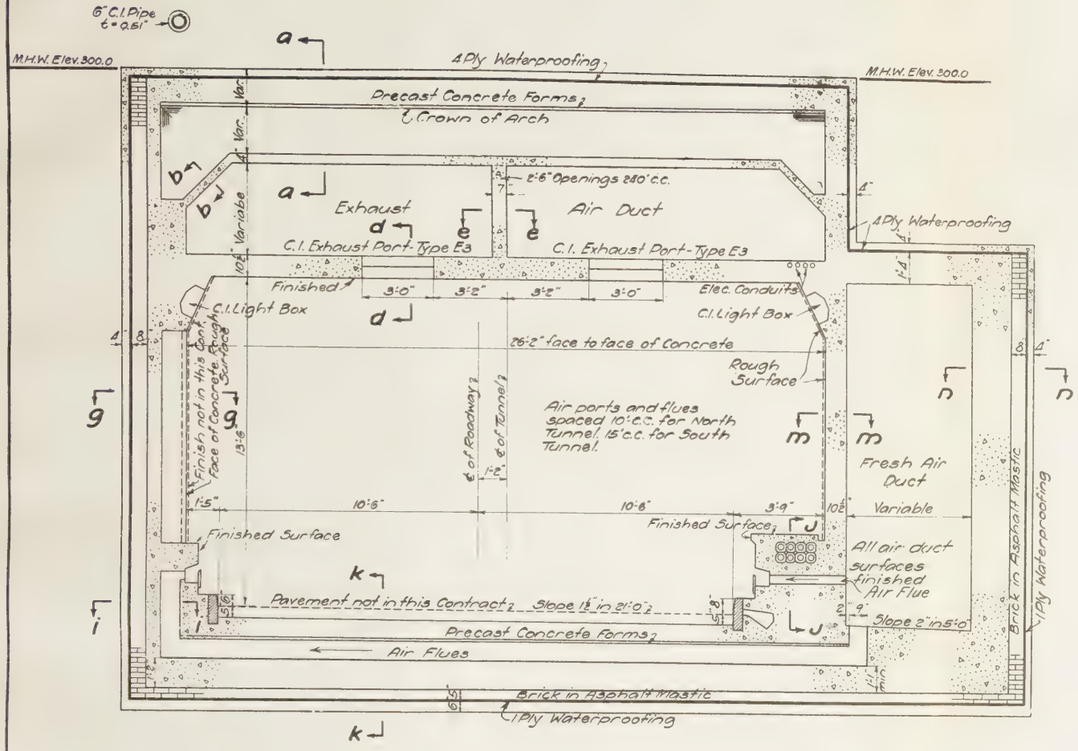
DATE: SEPTEMBER 10, 1924

CHIEF ENGINEER

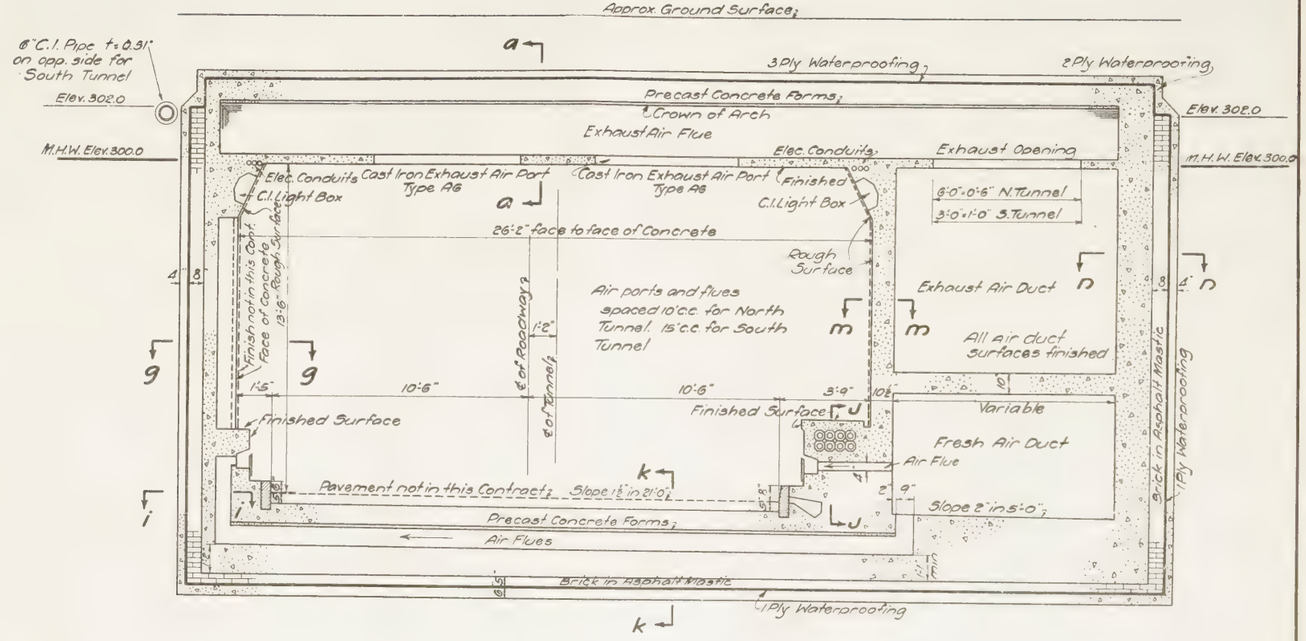
DRAWN BY M.G.
CHECKED BY E.R.J. E.W.

FILE NO. 1-6

M. B. BROWN PRINTING & BINDING CO. N. Y.



CROSS SECTION-AIR DUCTS ON TOP & SIDE
NORTH & SOUTH TUNNELS



CROSS SECTION-AIR DUCTS ON SIDE
NORTH & SOUTH TUNNELS

For Alinement and Profile	see Dwg. No. 1 File No. 1-6
For Plan and Sections	" " 4-9 " 1-6
For Interior Details	" " 10 " 1-6
For Sections-Concrete Details	" " 12 " 1-6

CONCRETE DETAILS

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 11

Clifford Brightson
ENGINEER OF DESIGNS

SCALE: 0 1 2 3 FEET

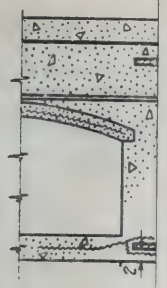
DATE: SEPTEMBER 10, 1924

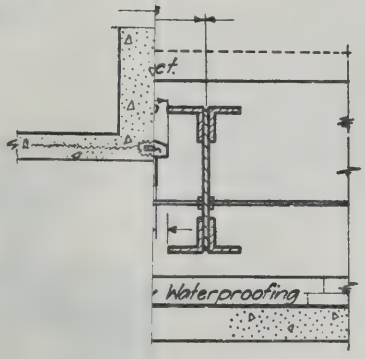
DRAWN BY M.G.
CHECKED BY E.K.J. E.W.

Allen Hollister
CHIEF ENGINEER

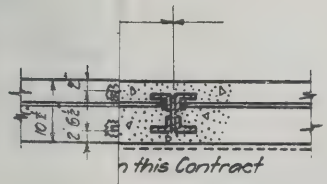
FILE NO. 1-6

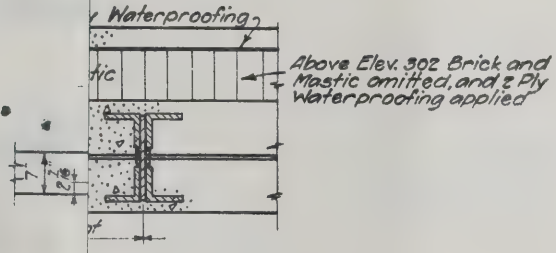
M & B. BROWN PRINTING & BINDING CO. N. Y.





For Alinement and Profile see Dwg. No. 1 File No. 1-6
For Plan and Sections " " " 4-9 " " 1-6
For Interior Details " " " 10 " " 1-6
For Location of Sections " " " 11 " " 1-6





NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 12

SCALE: 0 3 6 9 12 INCHES

DATE: SEPTEMBER 10, 1924

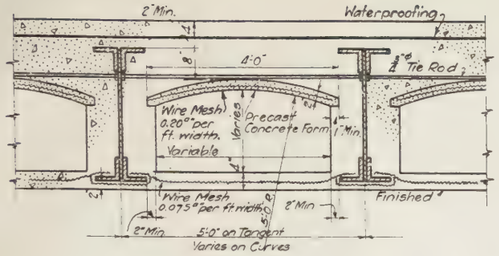
Ole Singstad
ENGINEER OF DESIGN

CHIEF ENGINEER

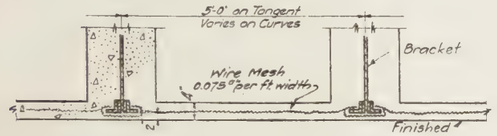
DRAWN BY B.A.S.
CHECKED BY [illegible]

FILE NO. 1-6

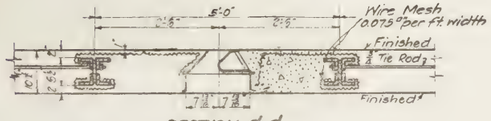
M. B. BROWN PRINTING & BINDING CO., N. Y.



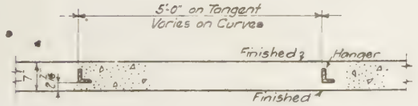
SECTION a-a



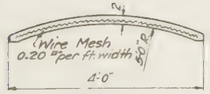
SECTION b-b



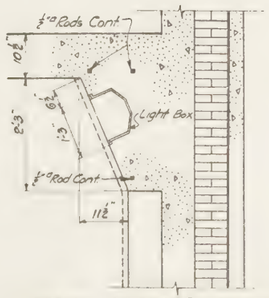
SECTION d-d



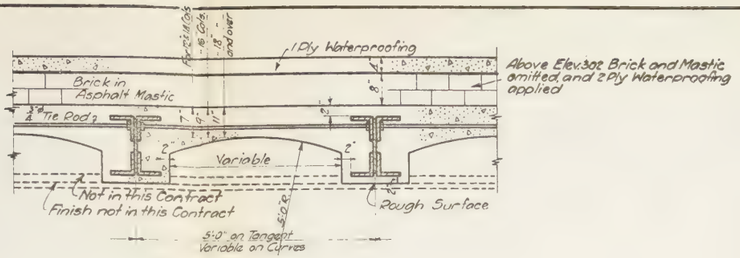
SECTION e-e



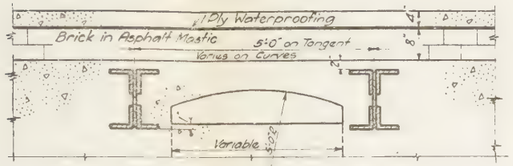
PRECAST CONCRETE FORM



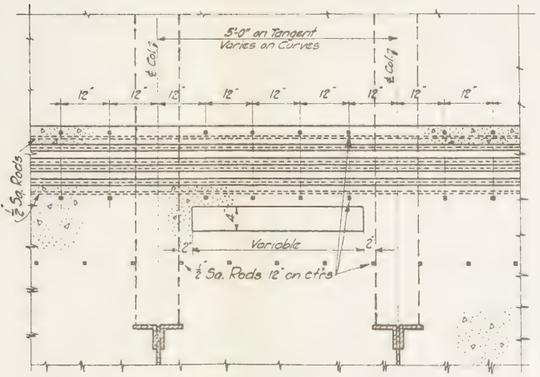
DETAIL AT COVE & LIGHT BOX


1 Ply Waterproofing
Above Elev. 30' Brick and Mastic omitted and 2 Ply Waterproofing applied
Brick in Asphalt Mastic
¾" Tie Rod
Variable
Not in this Contract
Finish not in this Contract
Rough Surface
5'-0" on Tangent
Variable on Curves

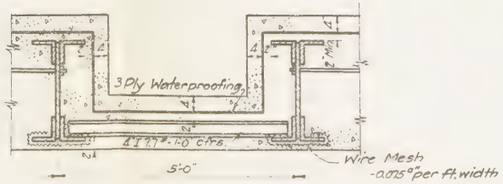
SECTION g-g



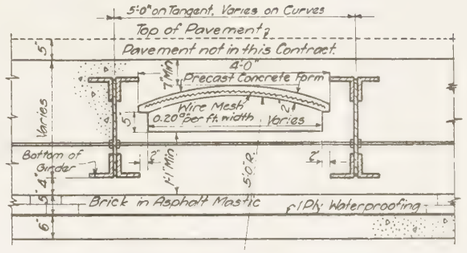
SECTION i-i



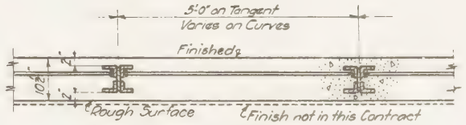
SECTION J-J



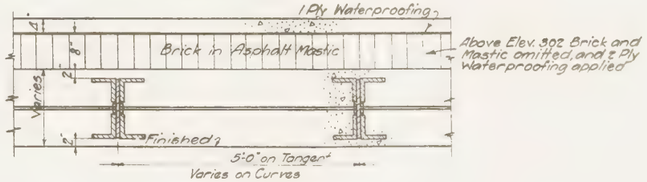
DEPRESSED BAY



SECTION K-K



SECTION M-M


1 Ply Waterproofing
Brick in Asphalt Mastic
Above Elev. 90' Brick and Mastic omitted, and 2 Ply Waterproofing applied
Finished
5'-0" on Tangent
Varies on Curves

SECTION N-N

For Alinement and Profile see Dwg. No. 1 File No. 1-6
For Plan and Sections " " " 4-9 " " 1-6
For Interior Details " " " 10 " " 1-6
For Location of Sections " " " 11 " " 1-6

Ole Singstad
ENGINEER OF DESIGN

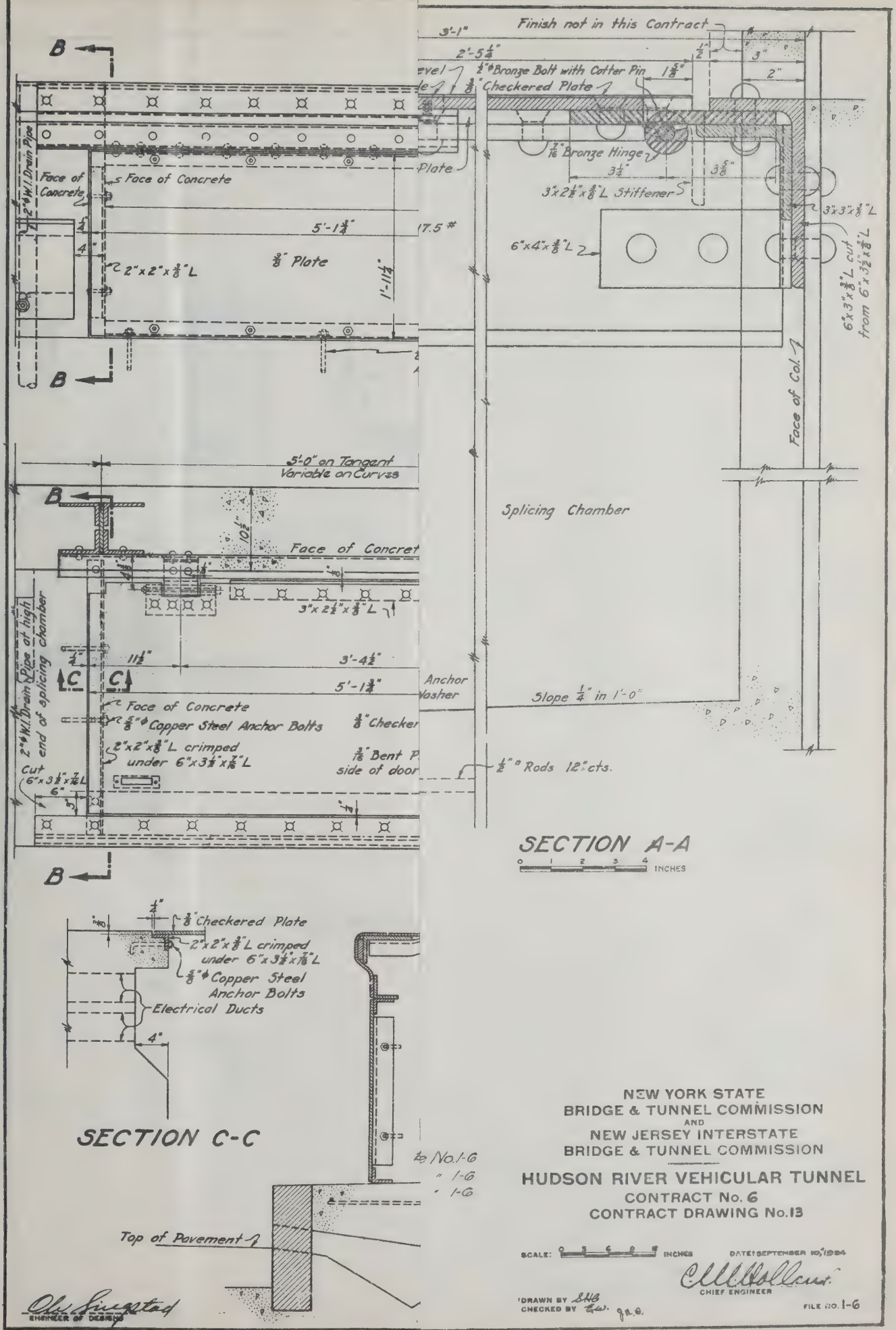
CONCRETE DETAILS

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

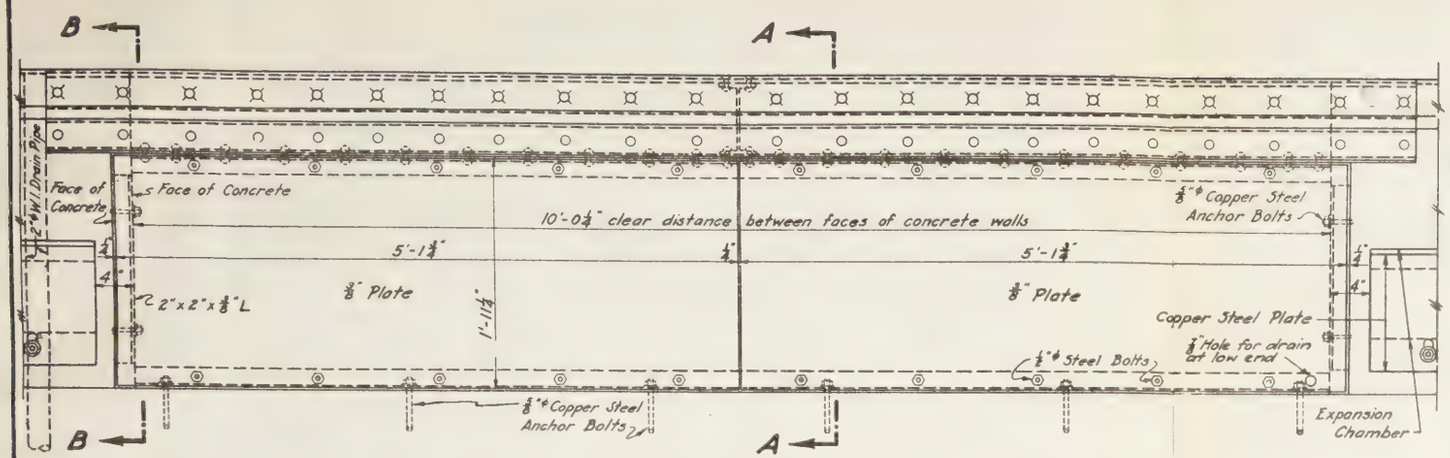
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 12

SCALE: 0 3 6 9 12 INCHES
DATE: SEPTEMBER 10, 1924
CHIEF ENGINEER
DRAWN BY D.A.L.
CHECKED BY
FILE NO. 1-6

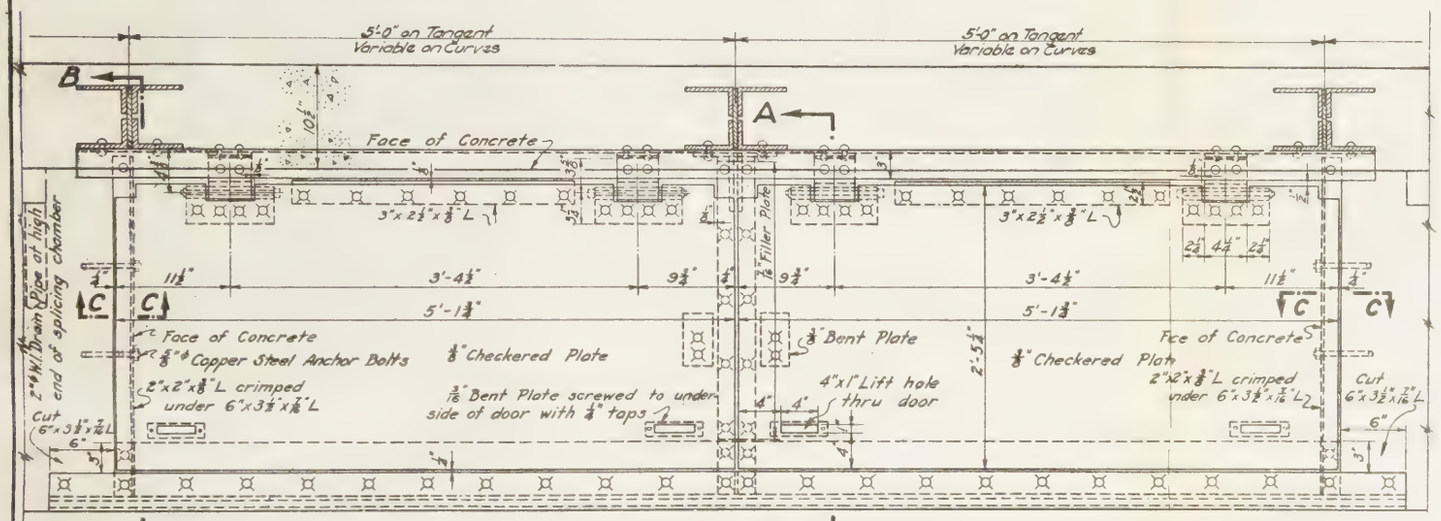
M. B. BROWN PRINTING & BINDING CO., N. Y.



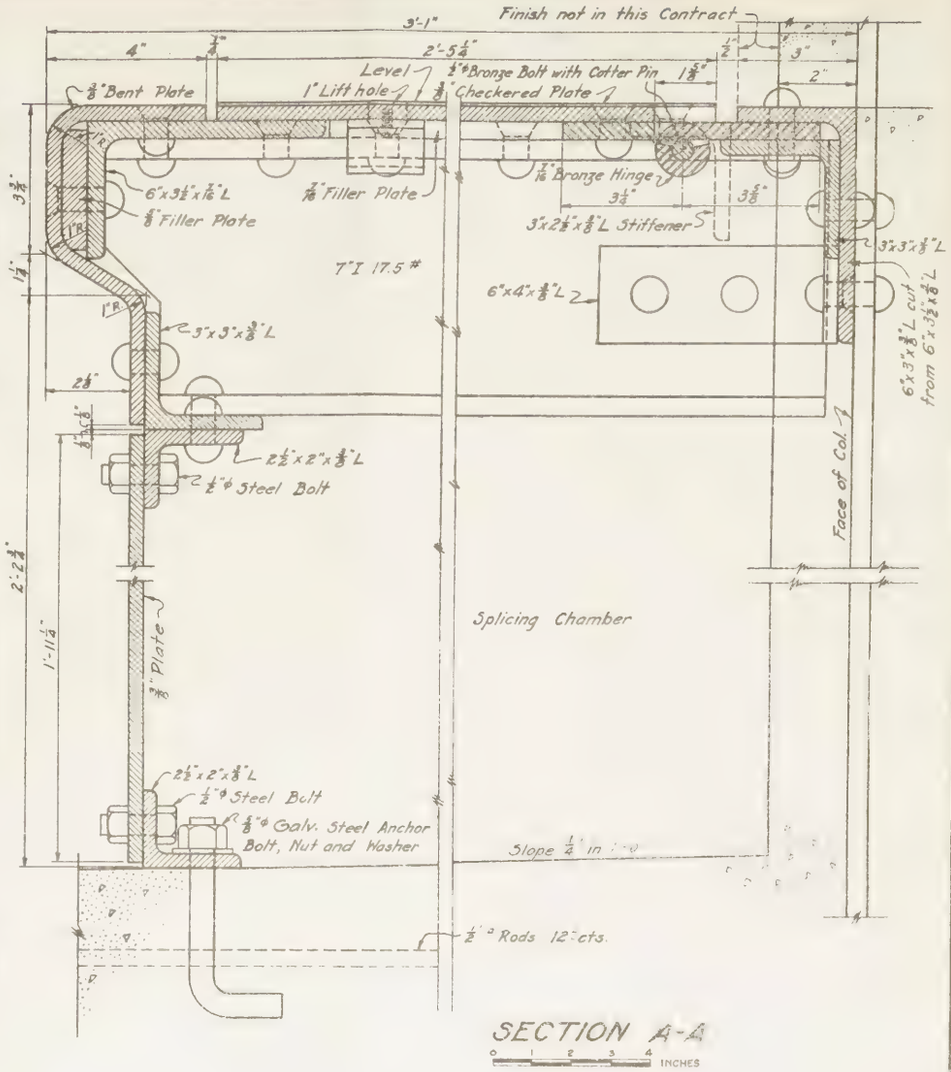
M. B. BROWN PRINTING & BINDING CO., N. Y.



FRONT ELEVATION

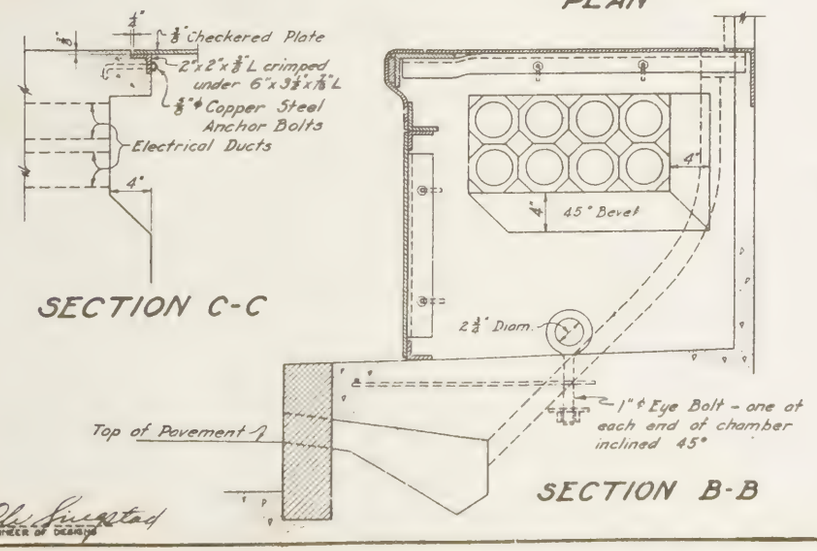


PLAN



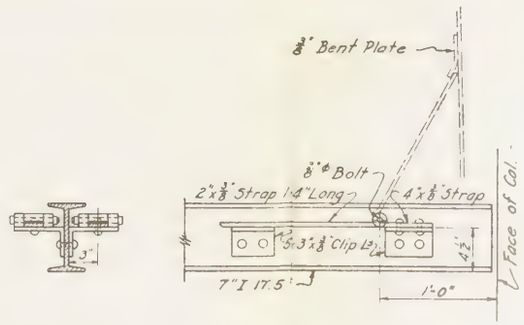
SECTION A-A

SCALE: 0 1 2 3 4 INCHES



SECTION C-C

SECTION B-B



HINGED HOLDERS FOR SIDEWALK DOORS

For Plan and Profile see Dwg. No. 1 File No. I-6
For Plan and Sections " " " 4-9 " " I-6
For Interior Details " " " 10 " " I-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

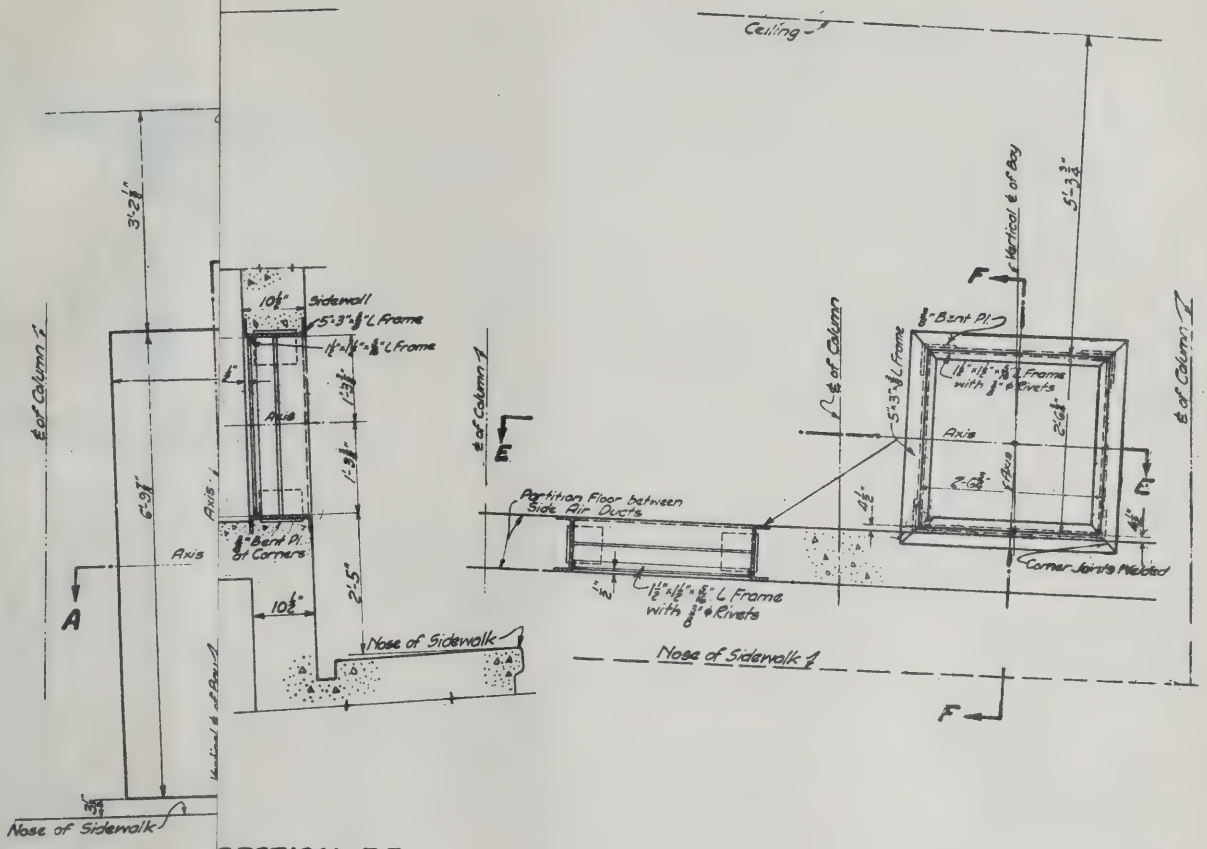
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 13

HIGH TENSION DUCT SPLICING CHAMBER

Ole Singstad
ENGINEER OF DESIGN

SCALE: 0 1 2 3 4 INCHES
DATE: SEPTEMBER 10, 1934
DRAWN BY: Skel
CHECKED BY: Ewo. G.A.G.
CHIEF ENGINEER
FILE NO. I-6

M. B. BROWN PRINTING & BINDING CO. N. Y.



SECTION F-F

ELEVATION
LOOKING TOWARD ROADWAY FROM SIDE AIR DUCTS

ELE

SEC R DUCT MANHOLES

RE

File No. 1-6
" " 1-6
" " 1-6
" " 1-6
" " 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 14

SCALE: 0 3 6 0 12 INCHES

DATE: SEPTEMBER 10, 1924

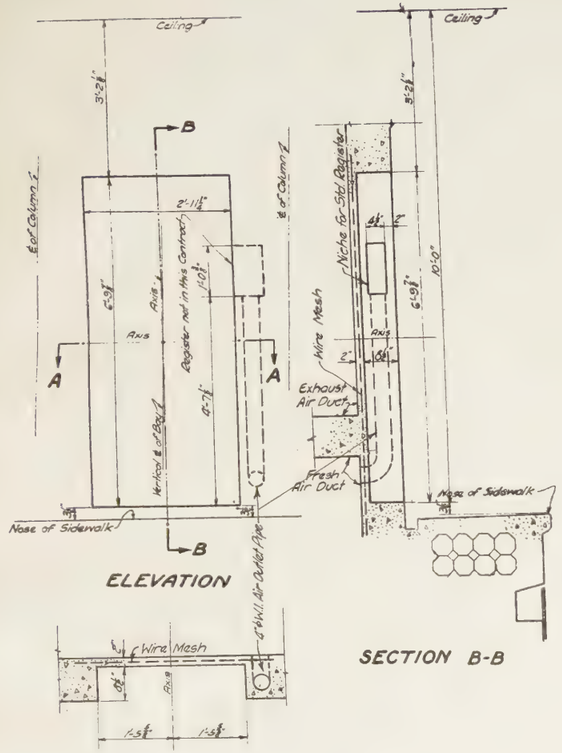
Ole Singstad
ENGINEER OF DESIGN

Clifford Holland
CHIEF ENGINEER

DRAWN BY SHE.
CHECKED BY EJO.

FILE NO. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y

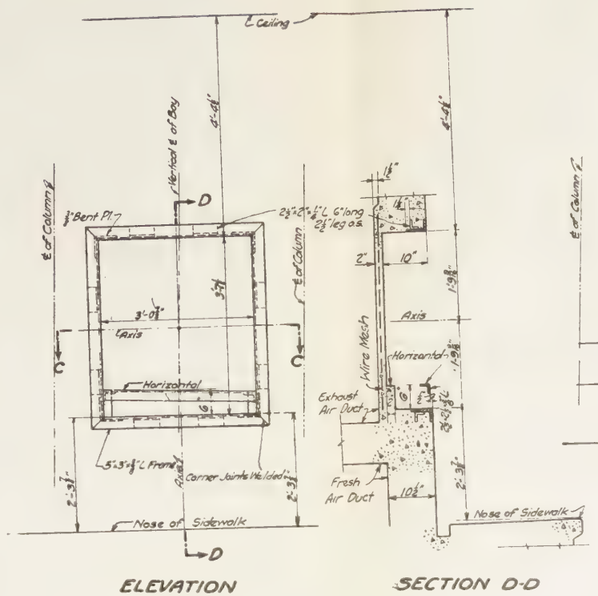


ELEVATION

SECTION B-B

SECTION A-A

REFUGE NICHE

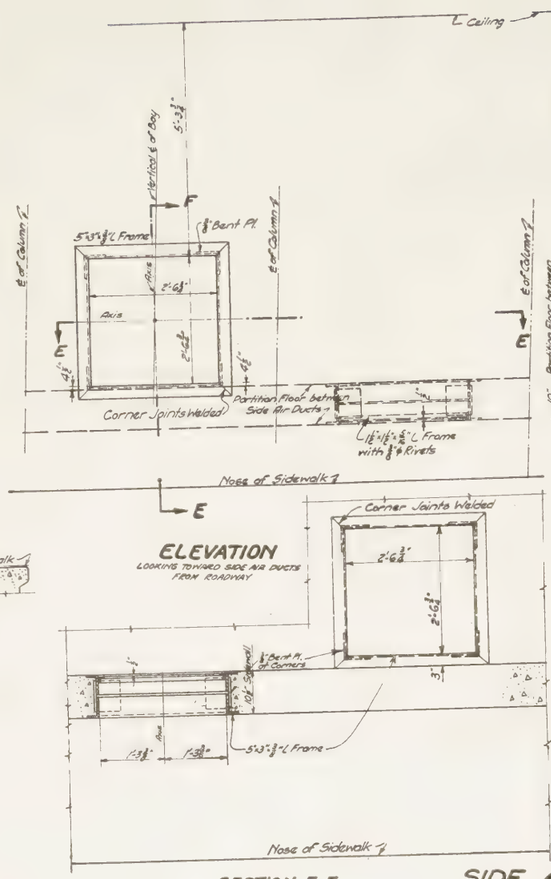


ELEVATION

SECTION C-C

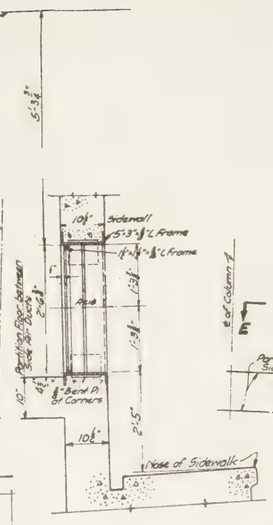
SECTION D-D

FIRE EXTINGUISHER NICHE

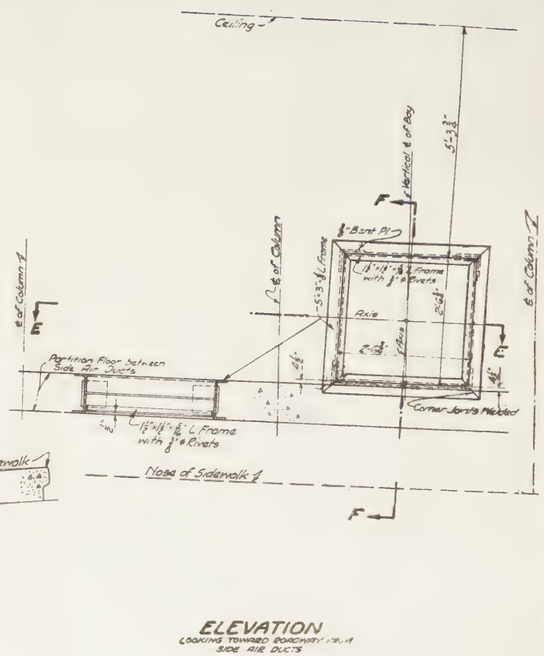


ELEVATION
LOOKING TOWARD SIDE AIR DUCTS FROM ROADWAY

SECTION E-E

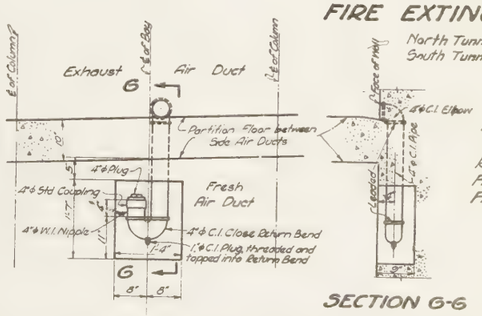


SECTION F-F



ELEVATION
LOOKING TOWARD ROADWAY FROM SIDE AIR DUCTS

SIDE AIR DUCT MANHOLES



SECTION G-G

NICHE & DRAIN PIPE IN SIDE AIR DUCTS

SPACING OF TUNNEL NICHES.

Fire Alarm, Telephone and Signal Control	spaced 400'c.to c. about	
Relay	" 400'c.to c.	"
Fire Extinguisher, single	" 240'c.to c.	"
Fire Extinguisher, double	" 240'c.to c.	"

Fire Alarm, Telephone and Signal Control Niche and Relay Niche are rectangular and located in the 10½ Side Air Duct Walls. The Fire Alarm, Telephone and Signal Control Niche is equipped with an angle frame.

For Alinement and Profile	see Dwg. No. 1 File No. 1-6
For Plan and Sections	" " " 4-9 " " 1-6
For Interior Details	" " " 10 " " 1-6
For Concrete Details	" " " 1H2 " " 1-6
For Details of Air Duct Manhole	" " " 15 " " 1-6

Ole Singstad
ENGINEER OF DESIGN

TUNNEL NICHES AND MANHOLES

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 14

SCALE: 0 2 6 8 12 INCHES

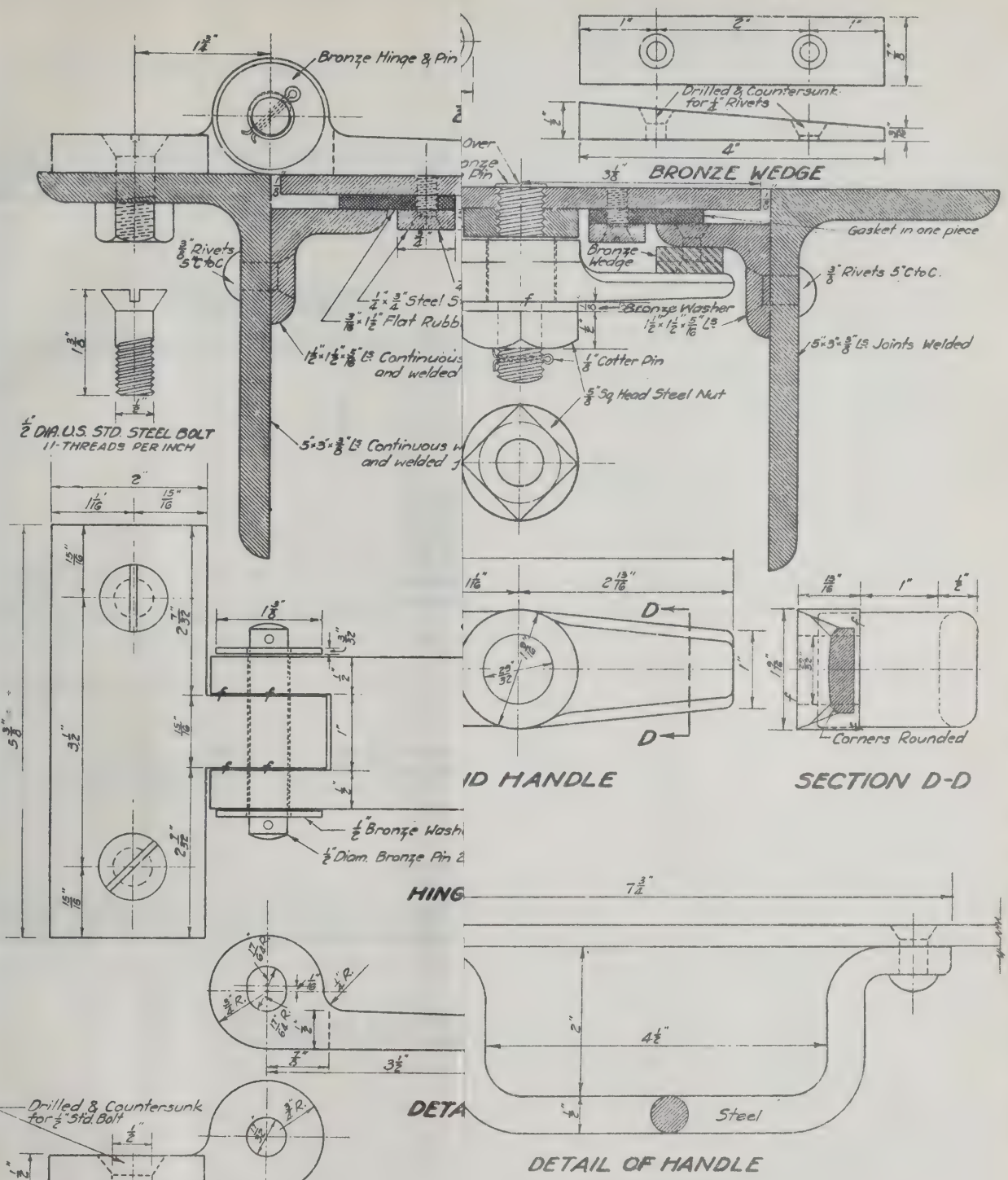
DATE: SEPTEMBER 10, 1924

DRAWN BY JHZ
CHECKED BY Lee.

Clifford Holland
CHIEF ENGINEER

FILE NO. 1-G

M. B. BROWN PRINTING & BINDING CO., N. Y.



For Alinem
For Plan a
For Interio
For Concre
For Side Ai
For Air Duc

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 15

SCALES: 0 ¼ ½ ¾ INCH
0 3 6 9 12 INCHES

DATE SEPTEMBER 10, 1924

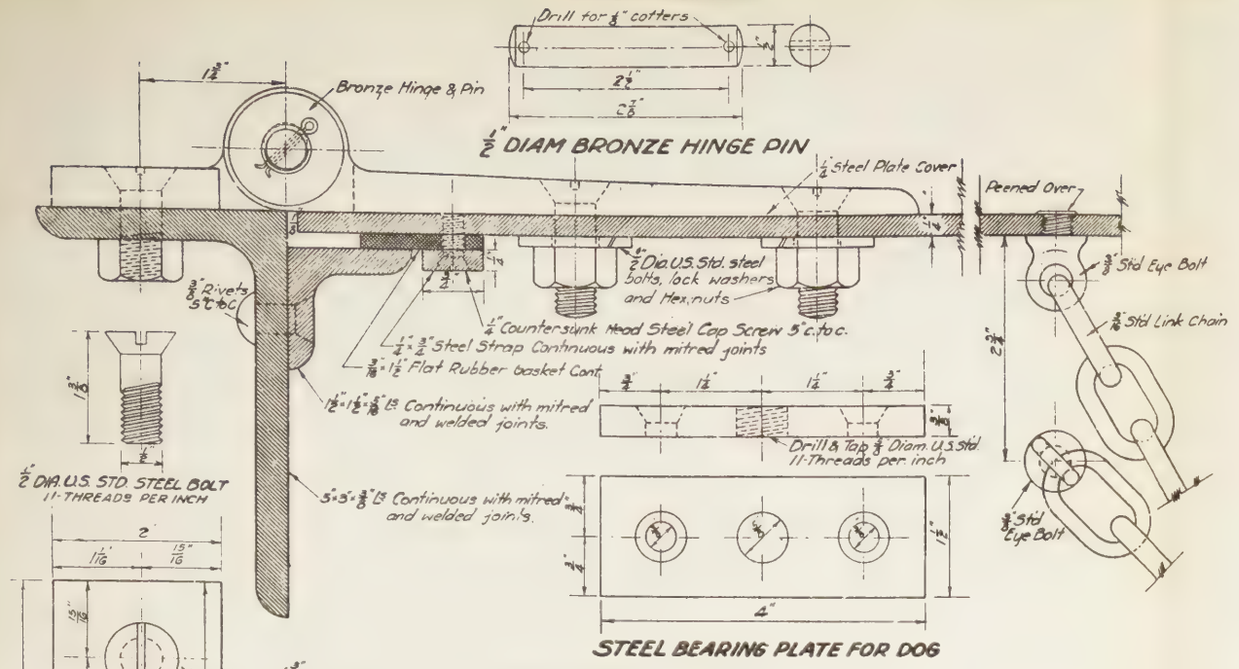
Ole Singstad
ENGINEER OF DESIGN

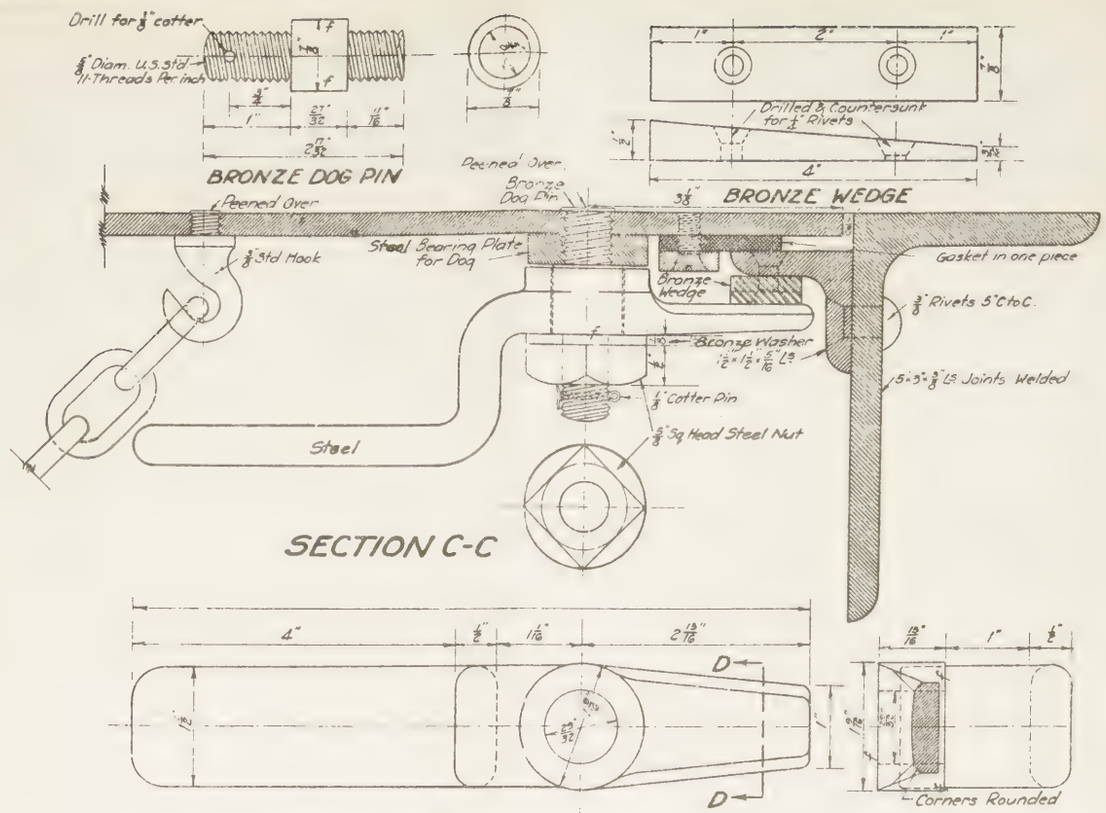
Clifford Holland
CHIEF ENGINEER

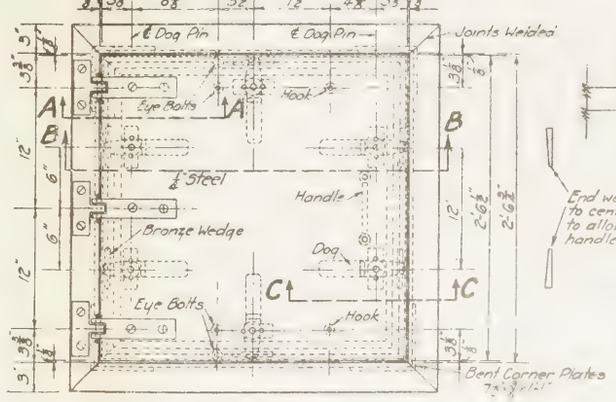
DRAWN BY M.G.C.
CHECKED BY A.L.S.

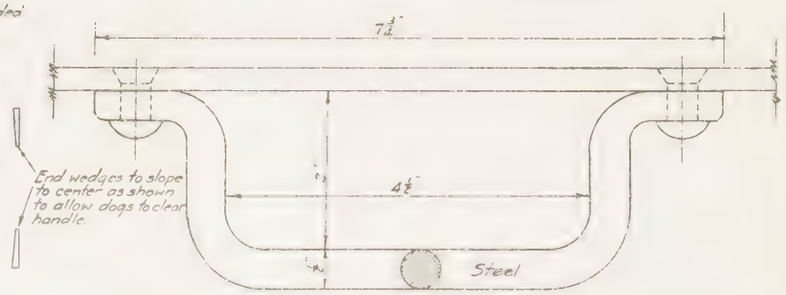
FILE NO. 1-6

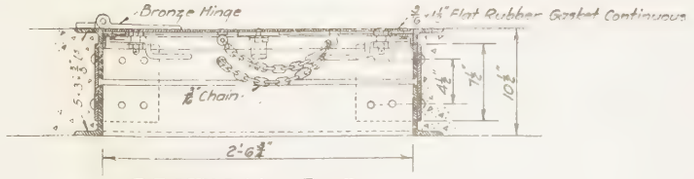
M. B. BROWN PRINTING & BINDING CO., N. Y.


Drill for ⅛" cotters
Bronze Hinge & Pin
½" DIAM BRONZE HINGE PIN
¼" Steel Plate Cover
Peened Over
⅜" Std Eye Bolt
⅜" Std Link Chain
½" Dia U.S. Std. steel bolts, lock washers and Hex. nuts
⅜" Rivets 5" c. to c.
¼" Countersunk Head Steel Cap Screw 5" c. to c.
¼" x ¾" Steel Strap Continuous with mitred joints
⅜" x 1½" Flat Rubber basket Cont.
½" x 1½" x ⅜" Ls Continuous with mitred and welded joints.
Drill & Tap ⅜" Diam. U.S. Std 11-Threads per inch
5" x 5" x ⅜" Ls Continuous with mitred and welded joints.
½" DIA U.S. STD. STEEL BOLT 11-THREADS PER INCH
STEEL BEARING PLATE FOR DOG
SECTION A-A
½" Bronze Washer
½" Diam. Bronze Pin 2⅞" long
HINGE ASSEMBLY PLAN
Drilled & Countersunk for ½" Std. Bolt
DETAIL OF BRONZE STRAP
Drilled & Countersunk for ½" Std. Bolt
DETAIL OF BRONZE PAD









For Alinement and Profile	see Drwg. No.	1	File No.	1-6
For Plan and Sections of Tunnels	" "	4-9	"	1-6
For Interior Details	" "	10	"	1-6
For Concrete Details	" "	11-12	"	1-6
For Side Air Duct Manhole	" "	14	"	1-6
For Air Ducts at Land Shafts	" "	18-25	"	1-6

Ole Singstad
ENGINEER OF DESIGN

AIR DUCT MANHOLE

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 15

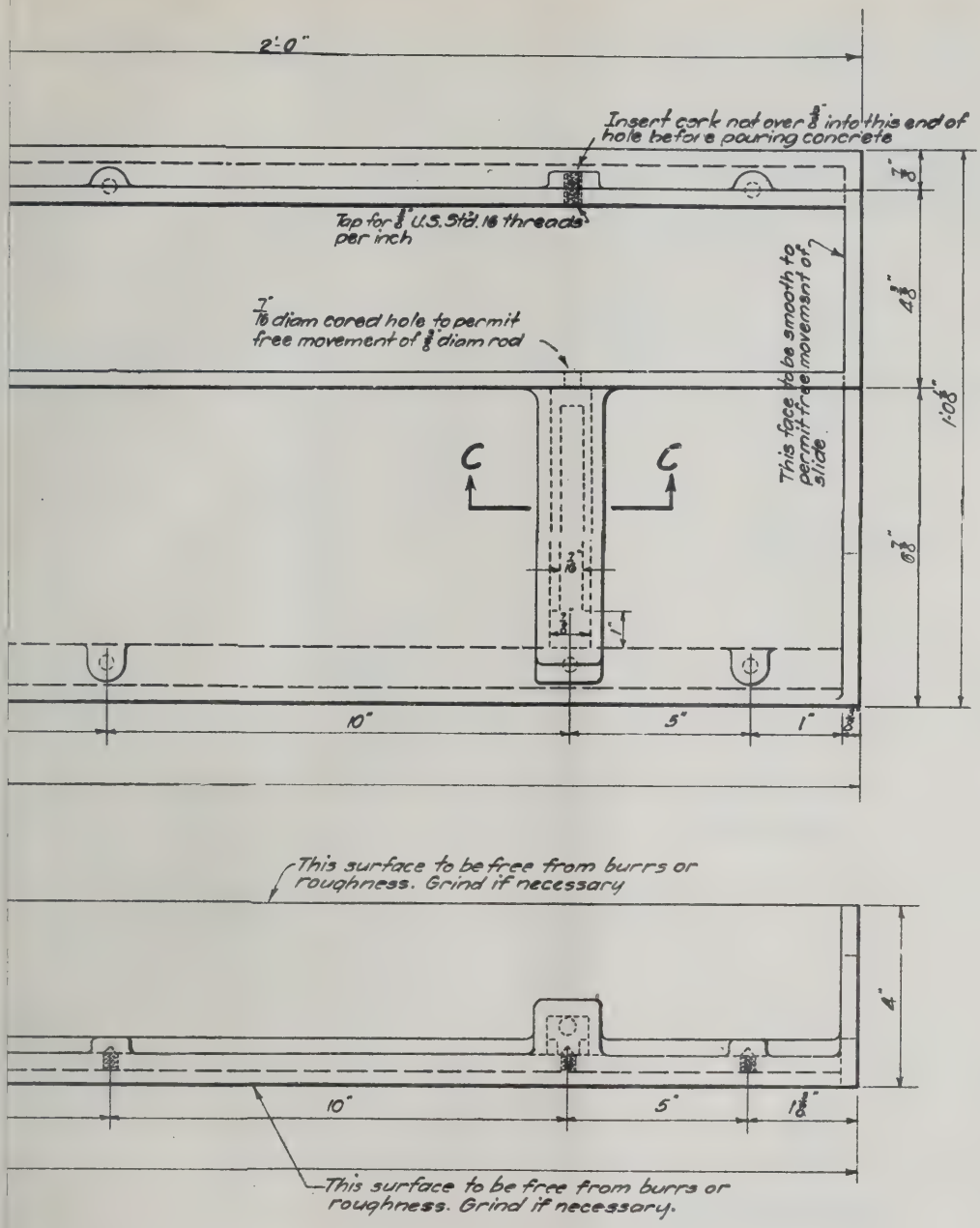
SCALES: ½ 1 2 3 INCH; 0 3 6 9 12 INCHES
DATE SEPTEMBER 10, 1924

CHIEF ENGINEER

DRAWN BY H.G.C.
CHECKED BY A.C.S.

FILE No. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.


2'-0"
Insert cork not over 1/8" into this end of hole before pouring concrete
Tap for 1/8" U.S. Std. 16 threads per inch
1" To diam cored hole to permit free movement of 1/8" diam rod
This face to be smooth to permit free movement of slide
C
C
10"
5"
1"
4"
This surface to be free from burrs or roughness. Grind if necessary
10"
5"
4"
This surface to be free from burrs or roughness. Grind if necessary.

...oped holes to be spaced by template.

...threads to be clean and sharp and ...be protected by rust proof material.

...ement and Profile see Dwg. No. 1 File No. 1-6
...uctural Plans " " 4-12 " " 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 16

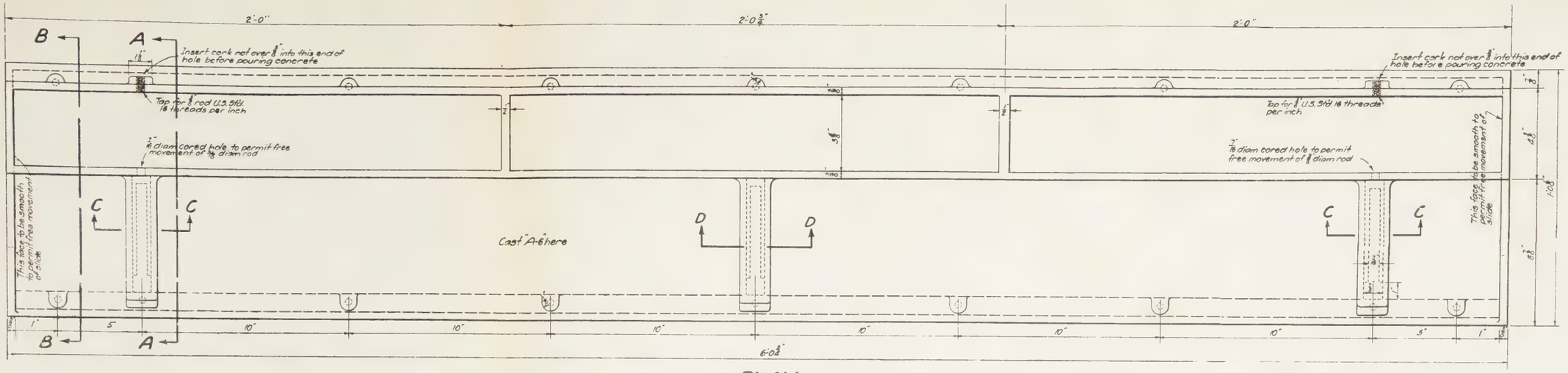
SCALE: 0 1 2 3 INCHES DATE: SEPTEMBER 10, 1924

C. C. Wallace
CHIEF ENGINEER

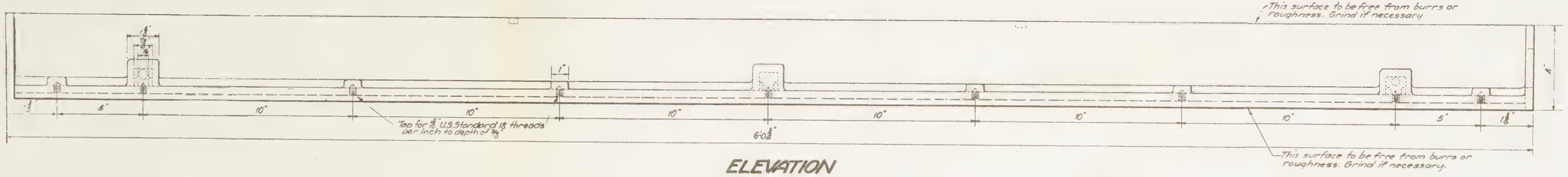
DRAWN BY ELDM
CHECKED BY ACS

FILE NO. 1-6

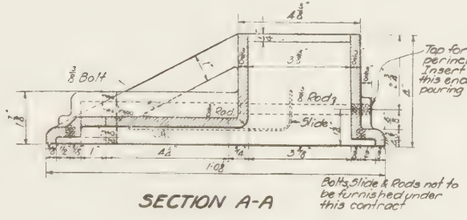
M. B. BROWN PRINTING & BINDING CO., N. Y.


2'-0"
2'-0 3/4"
2'-0"
Insert cork not over 1/8" into this end of hole before pouring concrete
Tap for 1" rod U.S. Std. 18 threads per inch
7/8" diam cored hole to permit free movement of 3/8" diam rod
This face to be smooth to permit free movement of slide
Cast "A-6" here
Insert cork not over 1/8" into this end of hole before pouring concrete
Tap for 1" U.S. Std. 18 threads per inch
7/8" diam cored hole to permit free movement of 1" diam rod
This face to be smooth to permit free movement of slide
6'-0 1/2"

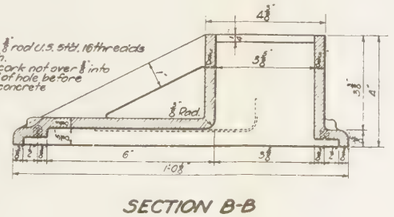
PLAN


This surface to be free from burrs or roughness. Grind if necessary
Tap for 1" U.S. Standard 18 threads per inch to depth of 3/4"
6'-0 1/2"
This surface to be free from burrs or roughness. Grind if necessary.

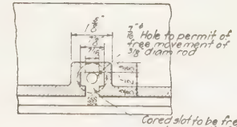
ELEVATION


3/8 Bolt
Pad
Slide
Tap for 1" rod U.S. Std. 16 threads per inch. Insert cork not over 1/8" into this end of hole before pouring concrete
Bolt, Slide & Pads not to be furnished under this contract

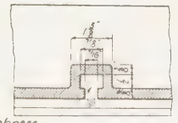
SECTION A-A



SECTION B-B


7/8" Hole to permit of free movement of 3/8" diam rod
Cored slot to be free from roughness to permit of free movement of 3/8" bolt with 1/16 square head

SECTION C-C



SECTION D-D

Note:
1/16 Tapped holes to be spaced by template.

All threads to be clean and sharp and to be protected by rust proof material.

For Alinement and Profile see Dwg. No. 1 File No. 1-6
For Structural Plans " " 4-12 " " 1-6

CAST IRON EXHAUST PORT - TYPE A6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 16

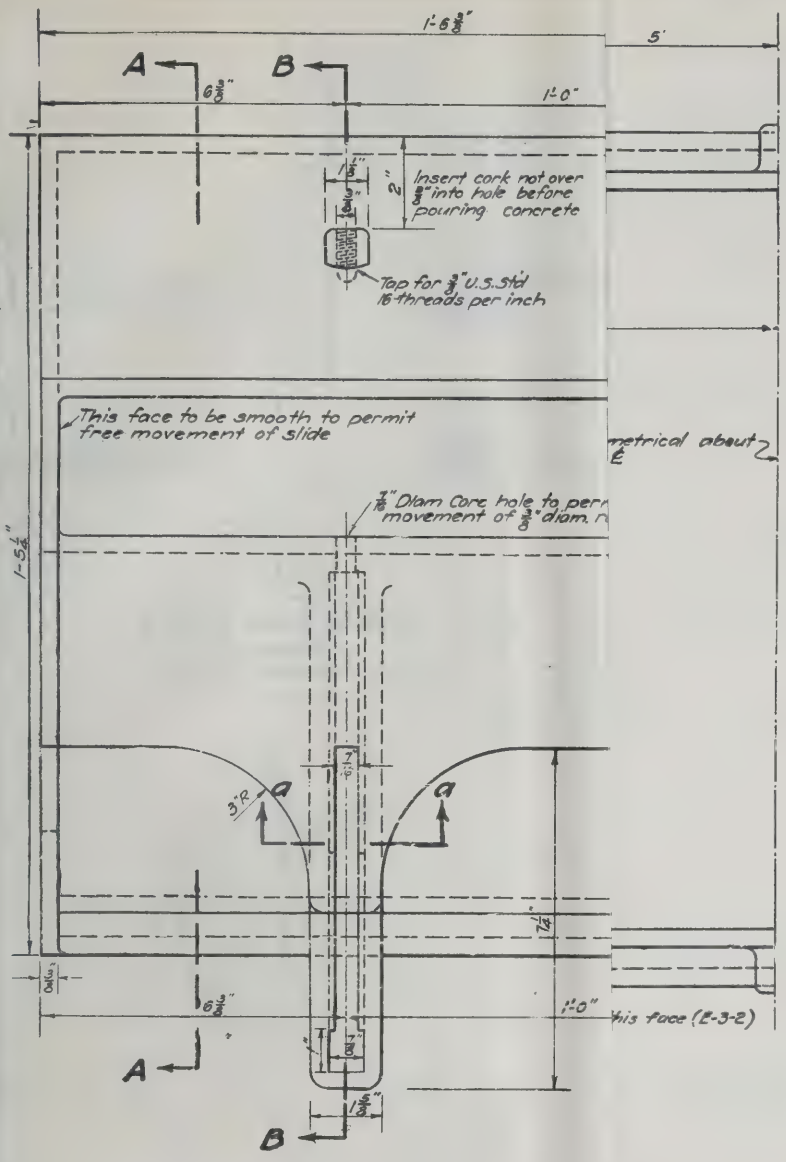
SCALE 0 1 2 3 INCHES DATE: SEPTEMBER 10, 1924

DRAWN BY [illegible]
CHECKED BY [illegible]

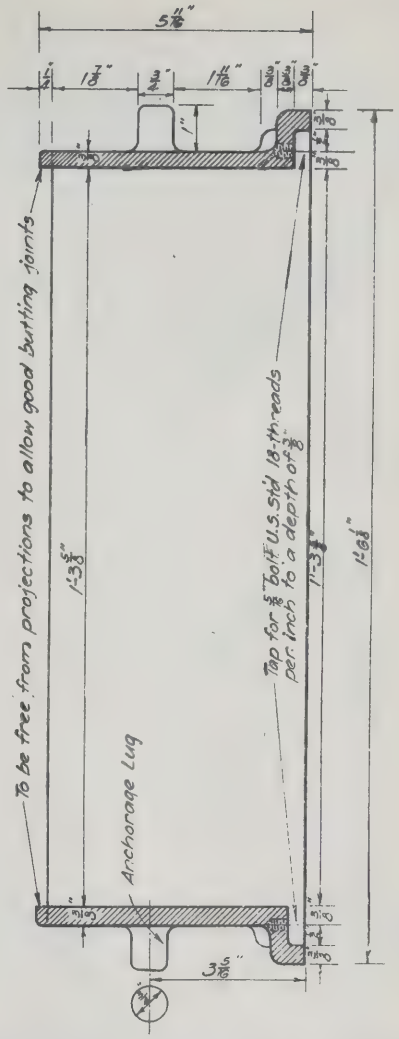
CHIEF ENGINEER

FILE No. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.

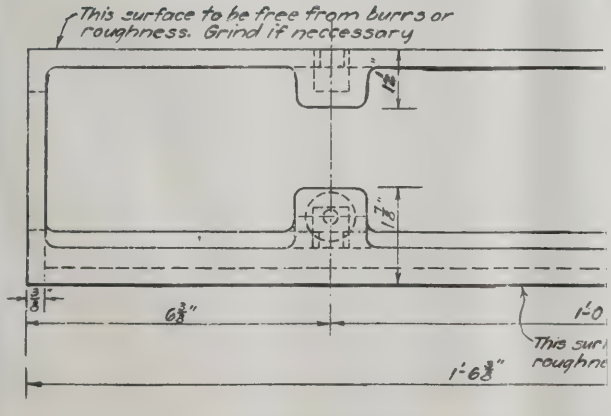

A
B
Insert cork not over ⅜" into hole before pouring concrete
Tap for ⅜" U.S.Std 16 threads per inch
This face to be smooth to permit free movement of slide
metrical about ℄
Dia. Core hole to perm movement of ⅜" diam. r
3"R
This face (E-3-2)

PLAN OF CASTING E-3-1


To be free from projections to allow good butting joints
Anchorage Lug
Tap for ⅝" Bolt U.S.Std 18 threads per inch to a depth of 1"

SECTION C-C OF CASTING E-3-2

For Alinement and Profile see Dwg. No. 1 File No. 1-6
For Structural Plans " " " 4-12 " " 1-6



ELEVATION OF CAST

Ole Singstad
ENGINEER OF DESIGN

CAST IR

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 17

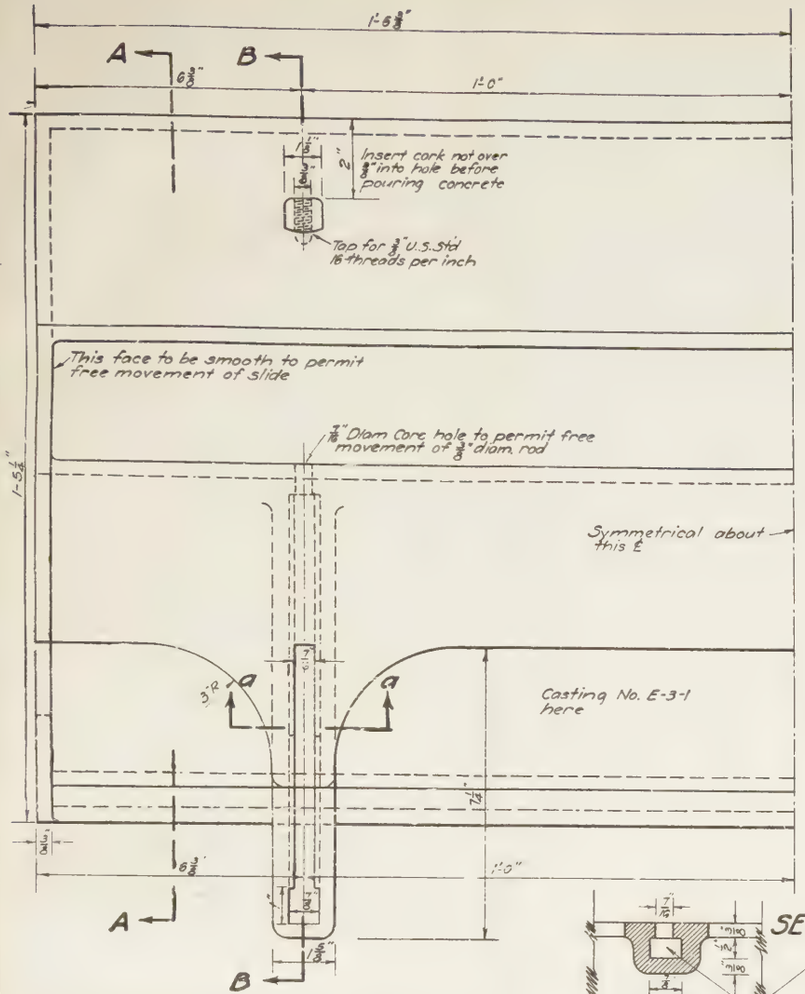
SCALE: 0 1 2 INCHES. DATE: SEPTEMBER 10, 1924

Clifford Holland
CHIEF ENGINEER

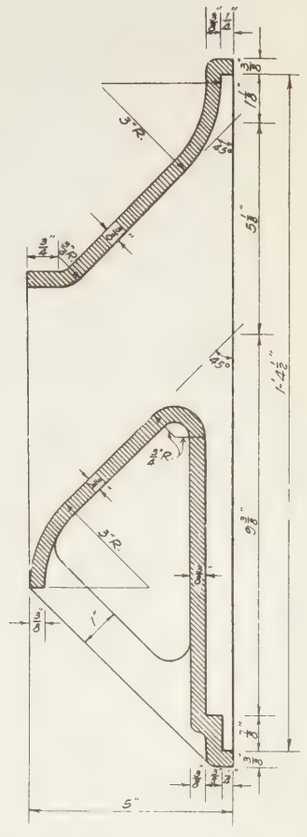
DRAWN BY H.F.C.
CHECKED BY [illegible]

FILE No. 1-6

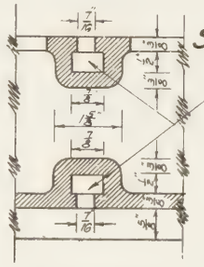
M. B. BROWN PRINTING & BINDING CO., N Y



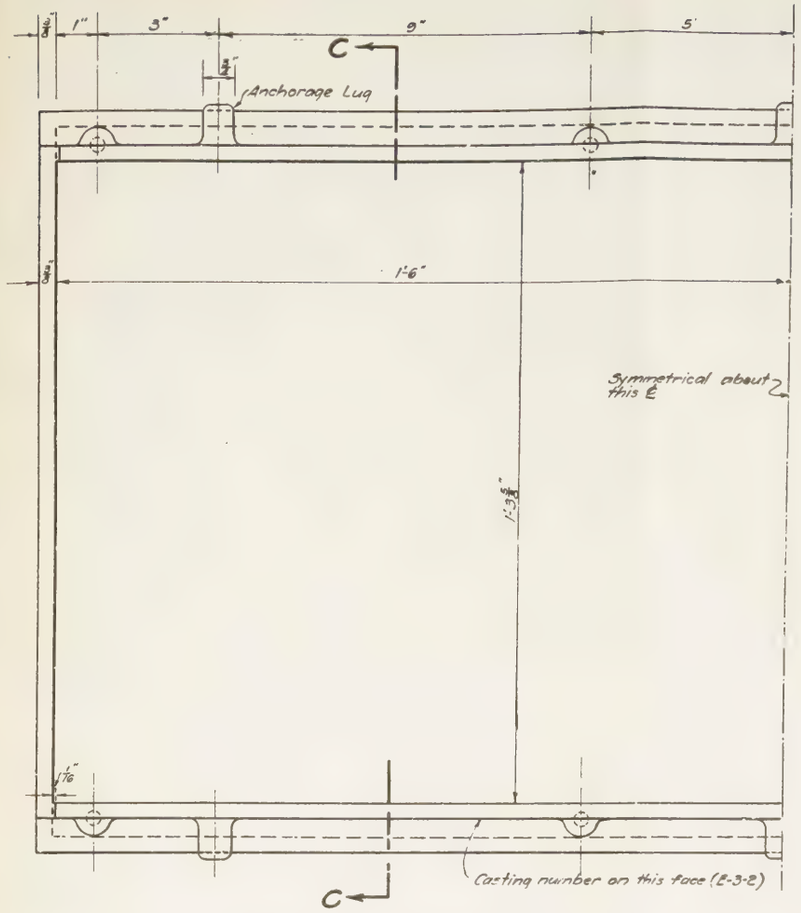
PLAN OF CASTING E-3-1



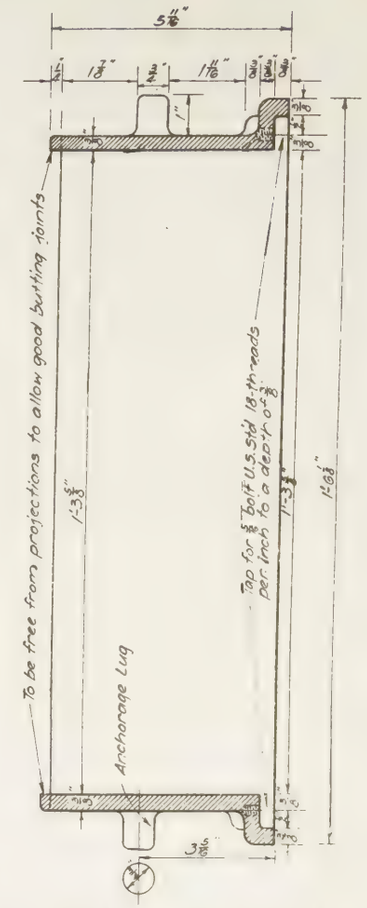
SECTION A-A OF CASTING E-3-1



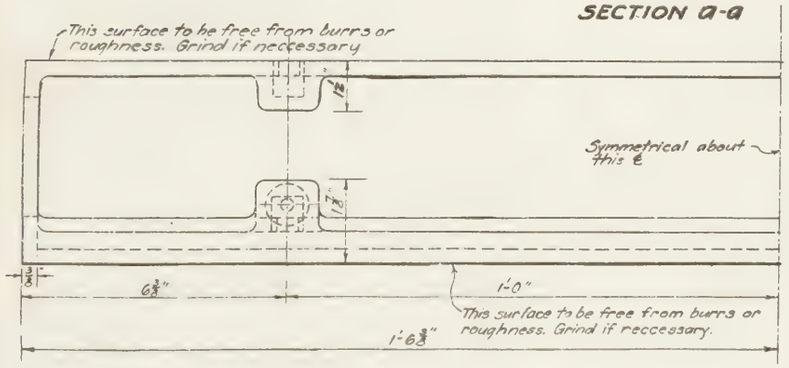
SECTION a-a



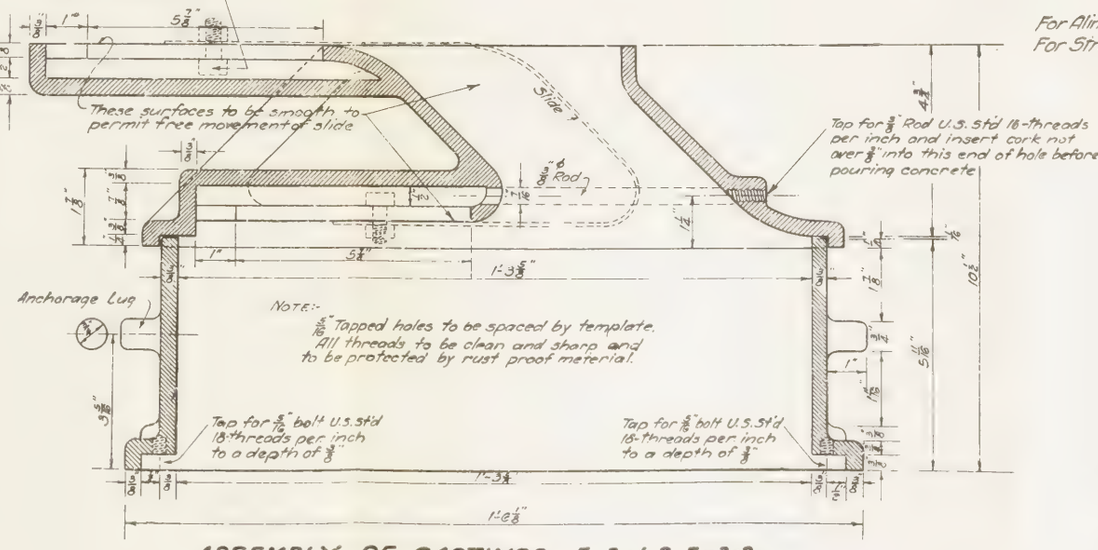
PLAN OF CASTING E-3-2


5 11/16"
1 3/8"
1 11/16"
1"
To be free from projections to allow good butting joints
Tap for 5/8" Bolt U.S. Std 18 threads per inch to a depth of 3/4"
1'-3 1/2"
1'-6 3/8"
Anchorage Lug
3 3/16"

SECTION C-C OF CASTING E-3-2


This surface to be free from burrs or roughness. Grind if necessary
Symmetrical about this ℄
6 3/4"
1'-0"
This surface to be free from burrs or roughness. Grind if necessary.
1'-6 3/8"

ELEVATION OF CASTING E-3-1


These surfaces to be smooth to permit free movement of slide
Slide
3/4" Rod
Tap for 3/4" Rod U.S. Std 18 threads per inch and insert cork not over 3/8" into this end of hole before pouring concrete
Anchorage Lug
NOTE:-
1 1/16" Tapped holes to be spaced by template. All threads to be clean and sharp and to be protected by rust proof material.
Tap for 5/8" bolt U.S. Std 18 threads per inch to a depth of 3/4"
Tap for 5/8" bolt U.S. Std 18 threads per inch to a depth of 3/4"
1'-3 3/8"
1'-3 1/4"
1'-6 3/8"
4 3/4"
10 3/4"
5 11/16"

ASSEMBLY OF CASTINGS E-3-1 & E-3-2
SECTIONS B-B & C-C

For Alinement and Profile see Dwg. No. 1 File No. 1-6
For Structural Plans " " " 4-12 " " 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 17

SCALE: 0 — 2 INCHES.

DATE: SEPTEMBER 10, 1924

Ole Singstad
ASSISTANT OF DESIGN

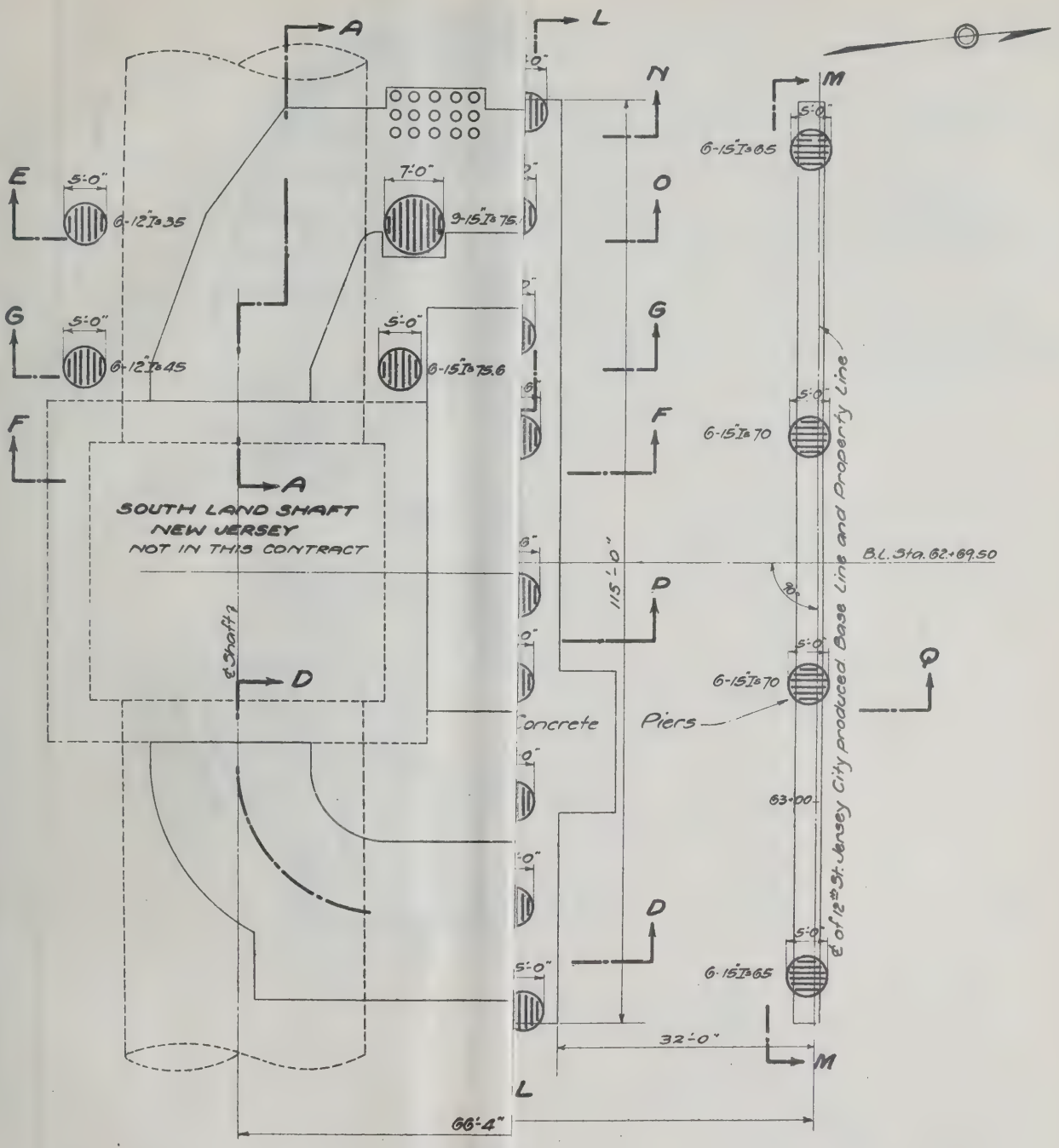
Allen Williams
CHIEF ENGINEER

DRAWN BY JJC
CHECKED BY OLS

FILE No. 1-6

CAST IRON EXHAUST PORT - TYPE E3

M. B. BROWN PRINTING & BINDING CO., N. Y.



NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 18

SCALE: 0 5 10 FEET

DATE SEPTEMBER 10, 1924

Ole Singstad
ENGINEER OF DESIGNS

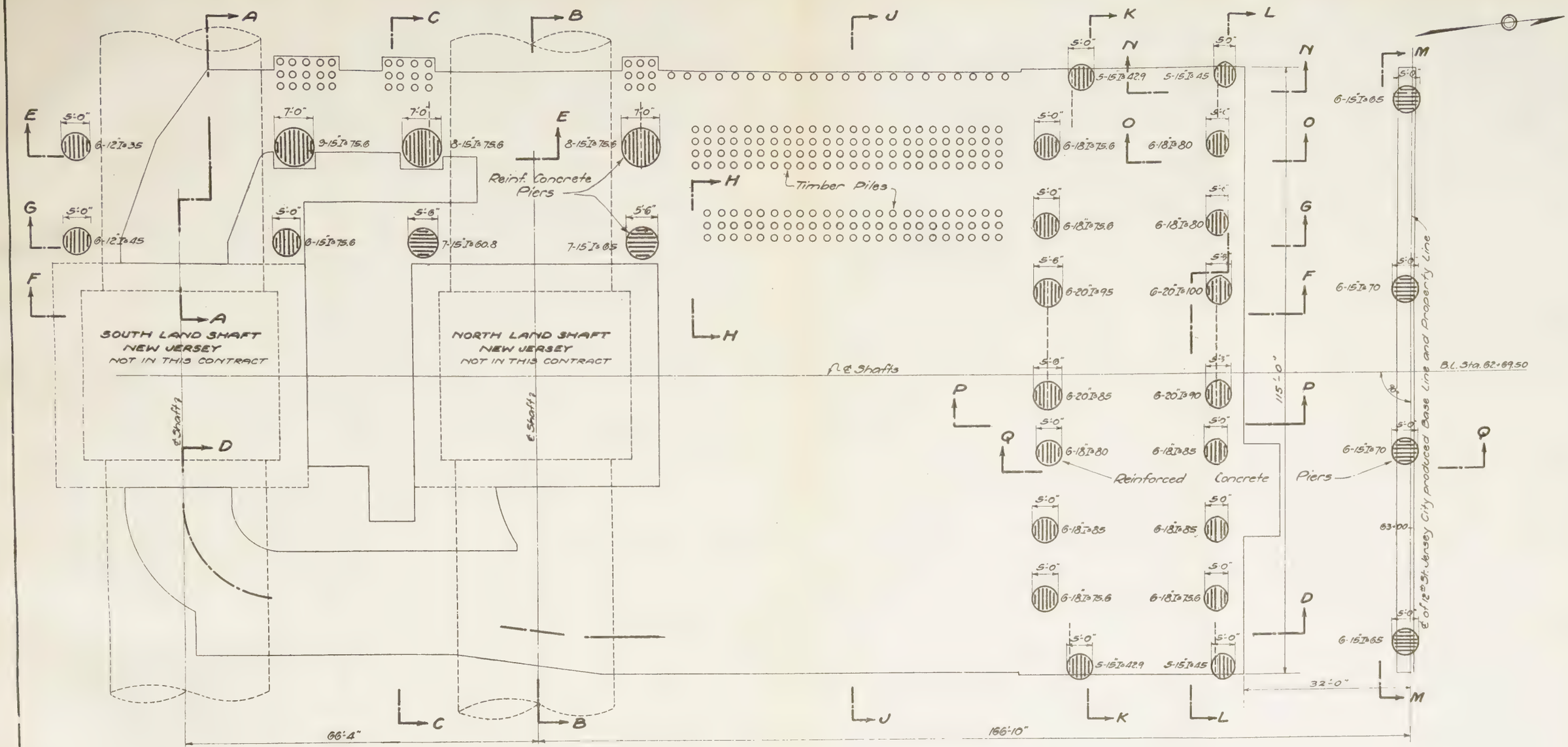
A

DRAWN BY R.F.J.
CHECKED BY O.H.S. B.W.

Clifford Holland
CHIEF ENGINEER

FILE NO. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.



FOUNDATION PLAN

For Alinement & Profile	see	Drwg.	No. 1	- File	No. 1-6
For Invert Plan	"	"	" 19	"	" 1-6
For Upper Air Duct Floor Plan	"	"	" 20	"	" 1-6
For Roof Plan	"	"	" 21	"	" 1-6
For Sections A-A, B-B, C-C, D-D, E-E & F-F	"	"	" 22	"	" 1-6
For Sections G-G, H-H, K-K, L-L, M-M & Q-Q	"	"	" 23	"	" 1-6
For Section J-J	"	"	" 24	"	" 1-6
For Sections N-N, O-O & P-P	"	"	" 25	"	" 1-6
For Girder & Column Schedules	"	"	" 26	"	" 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 18

Ole Singstad
ENGINEER OF DESIGNS

AIR DUCTS AT LAND SHAFTS-NEW JERSEY

SCALE 0 5 10 FEET

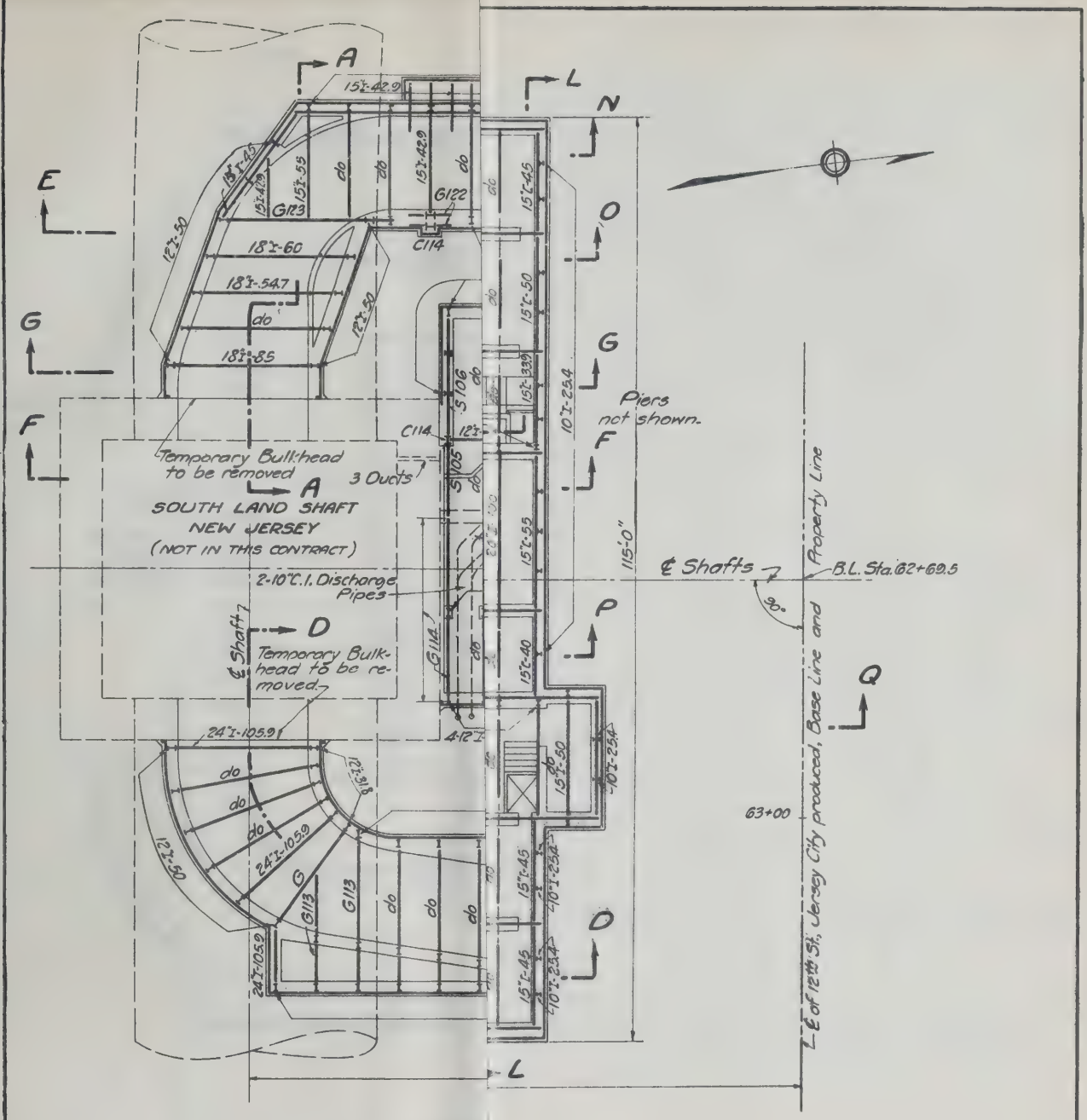
DATE SEPTEMBER 10, 1924

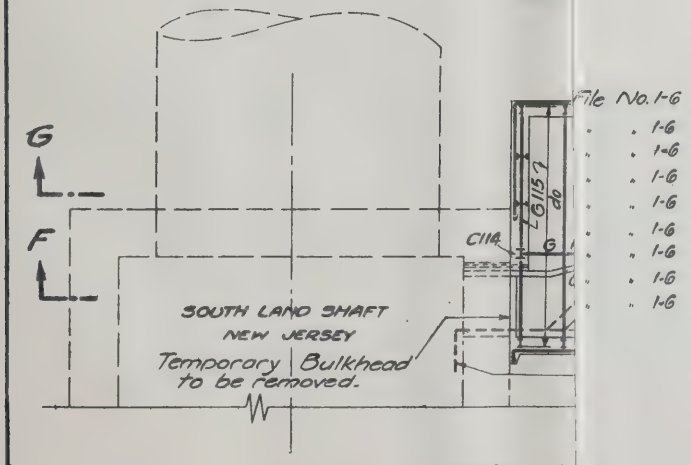
DRAWN BY F.P.L.
CHECKED BY O.H.S. E.W.

CHIEF ENGINEER

FILE NO. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.





File No. 1-6
. . 1-6
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. . 1-6
. . 1-6

INVERT PL

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 19

SCALE: 0 5 10 FEET

DATE: SEPTEMBER 10, 1924

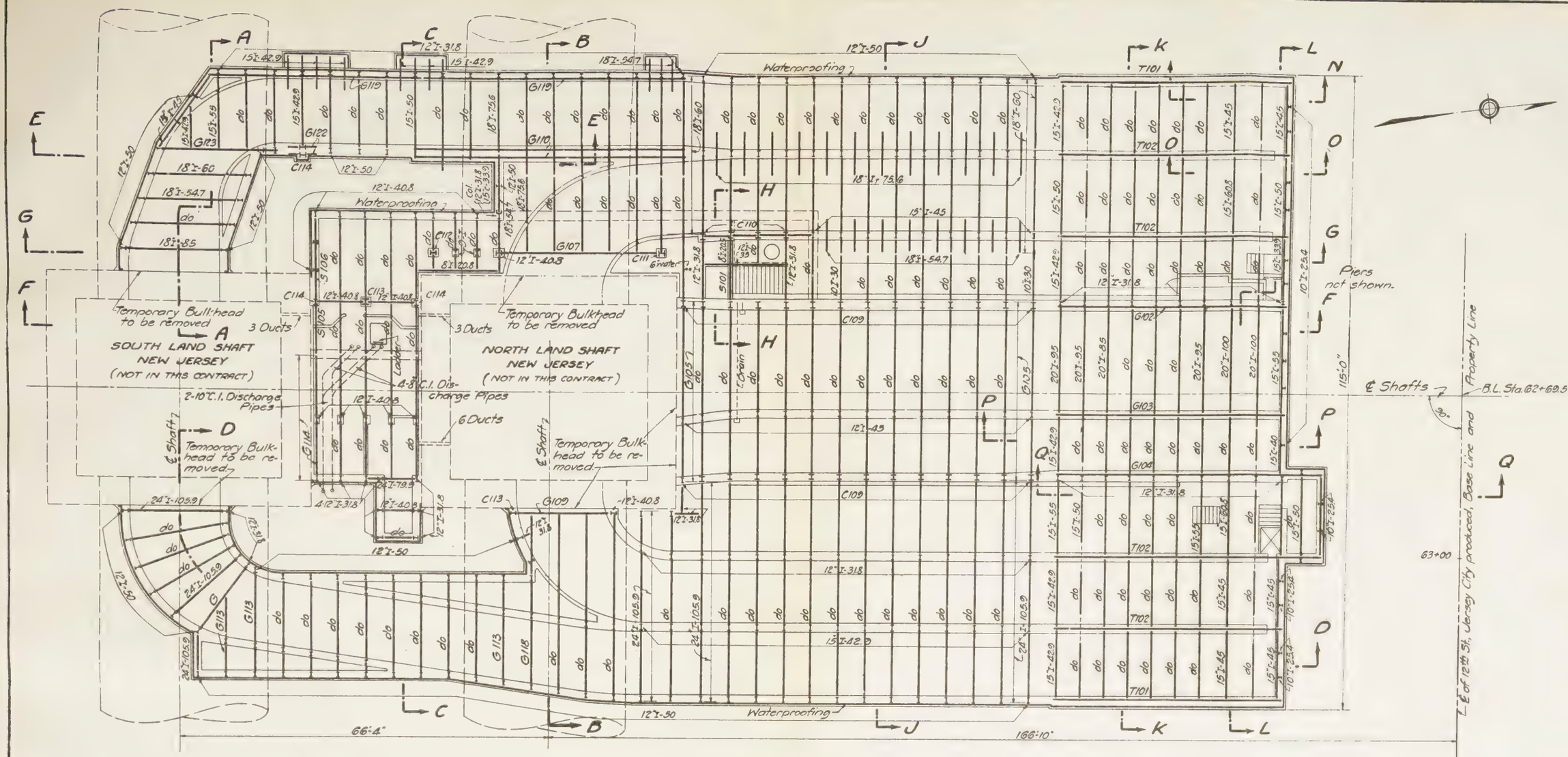
Ole Singstad
ENGINEER OF DESIGNS

C.H. Holland
CHIEF ENGINEER

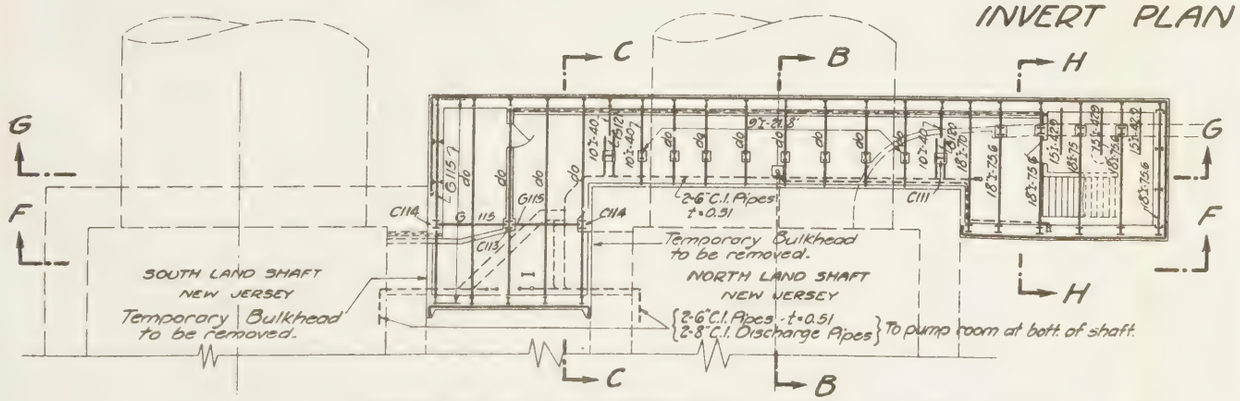
DRAWN BY P.F.
CHECKED BY [illegible] E.W.

FILE No. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.



INVERT PLAN



INVERT PLAN OF EMERGENCY EXIT - LOWER LEVEL

For Alinement & Profile	see Dwg. No. 1 - File No. 1-6
For Foundation Plan	" " " 18 " " 1-6
For Upper Air Duct Floor Plan	" " " 20 " " 1-6
For Roof Plan	" " " 21 " " 1-6
For Sections AA, B-B, C-C, D-D, E-E & F-F	" " " 22 " " 1-6
For Sections G-G, H-H, K-K, L-L, M-M & Q-Q	" " " 23 " " 1-6
For Section J-J	" " " 24 " " 1-6
For Sections N-N, O-O & P-P	" " " 25 " " 1-6
For Girder & Column Schedules	" " " 26 " " 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 19

AIR DUCTS AT LAND SHAFTS - NEW JERSEY

Ole Singstad
ENGINEER OF DESIGNS

SCALE 0 5 10 FEET

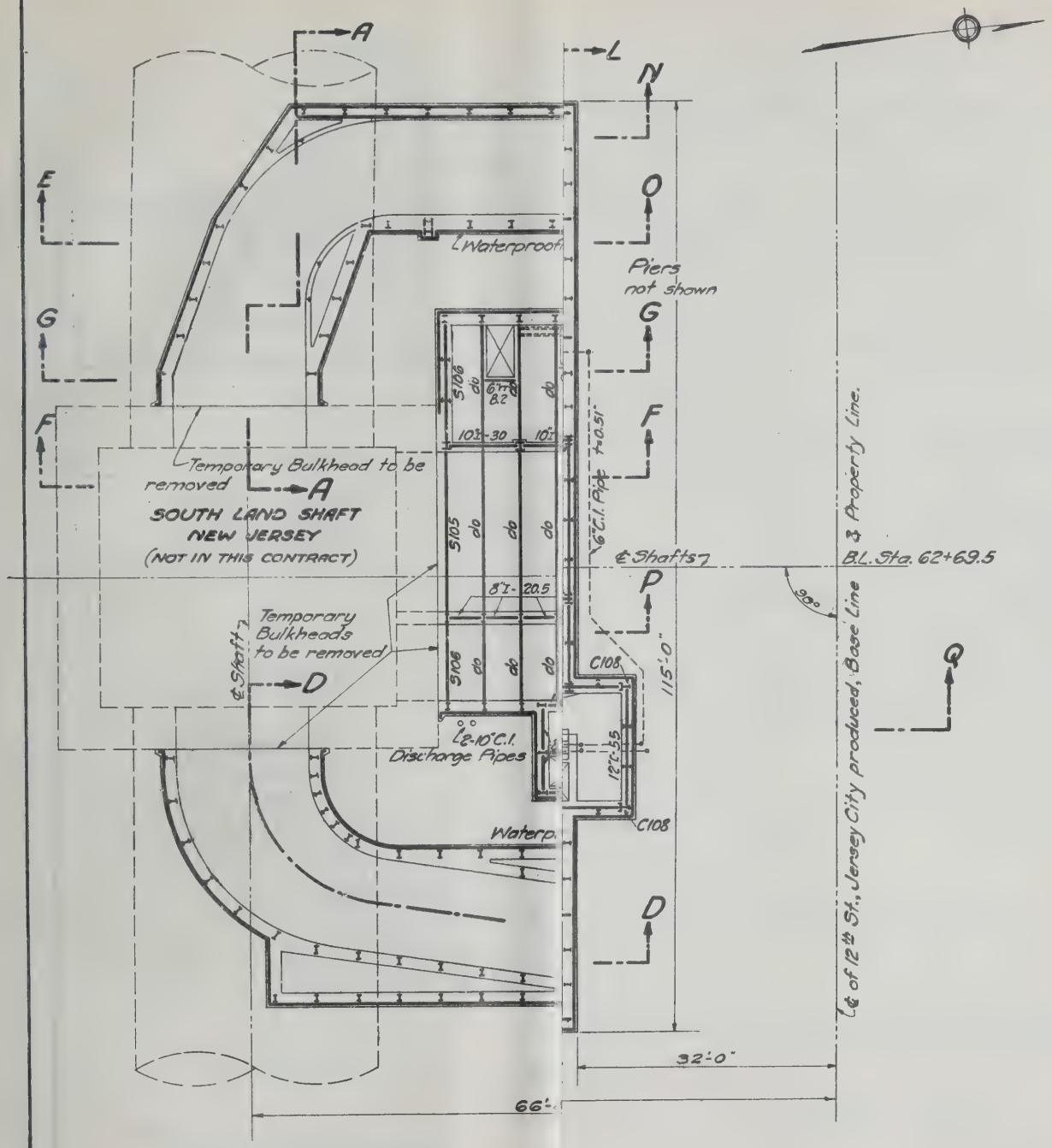
DATE: SEPTEMBER 10, 1924

Clifford Holland
CHIEF ENGINEER

DRAWN BY PSF
CHECKED BY [illegible]

FILE NO. 1-6

M. B. BROWN PRINTING & BINDING CO. N. Y.



NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 20

SCALE: 0 5 10 FEET

DATE SEPTEMBER 10, 1924

C. C. Holland
CHIEF ENGINEER

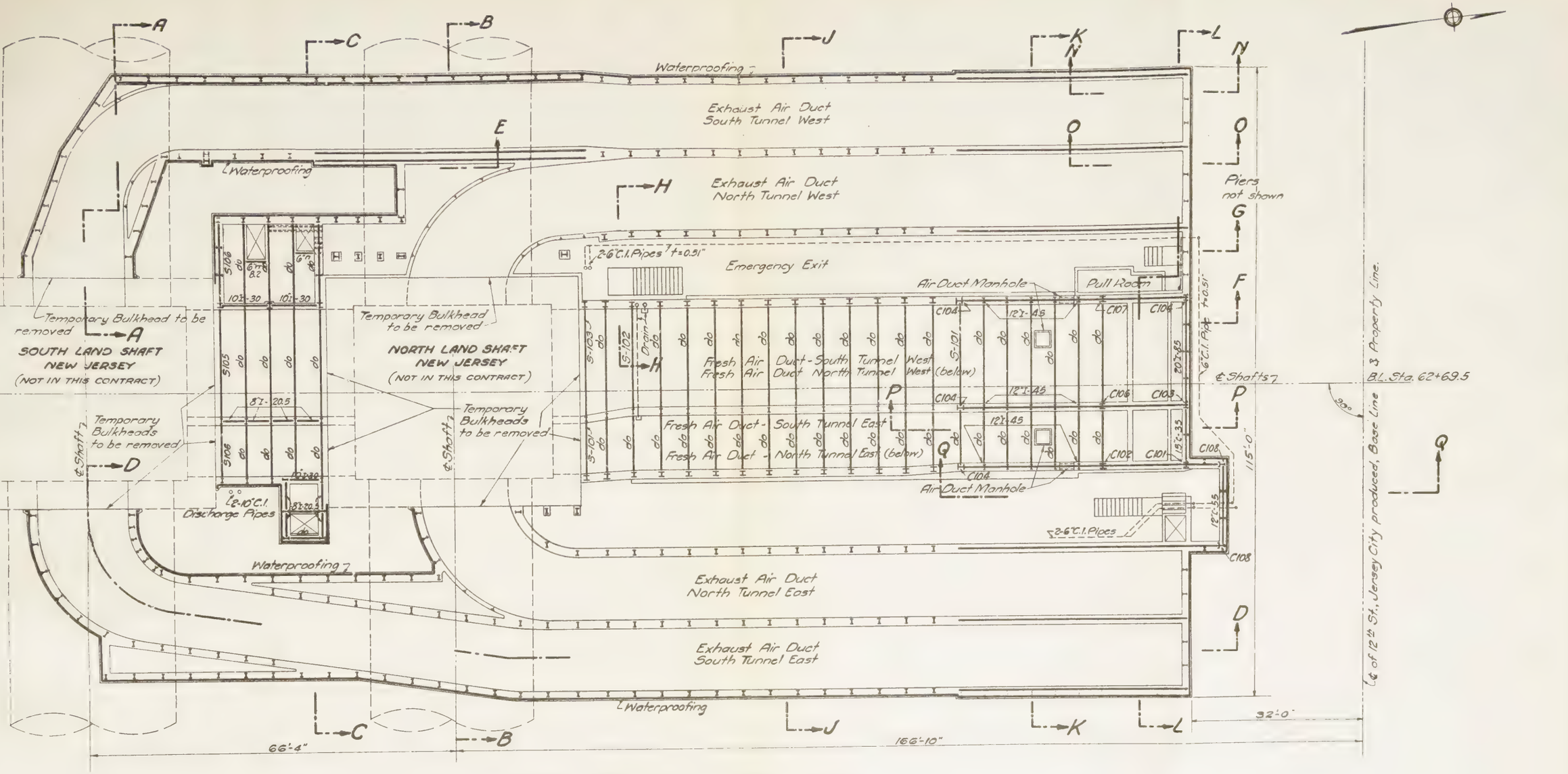
DRAWN BY OM
CHECKED BY H.F.S. Tw.

FILE NO. I-6

AIR

Ole Singstad
ENGINEER OF DESIGNS

M. B. BROWN PRINTING & BINDING CO., N. Y.



UPPER AIR DUCT FLOOR PLAN

For Alinement & Profile	see	Dwg.	No.	1	- File No.	1-6
For Foundation Plan	"	"	"	18	" "	1-6
For Invert Plan	"	"	"	19	" "	1-6
For Roof Plan	"	"	"	21	" "	1-6
For Sections A-A, B-B, C-C, D-D, E-E & F-F	"	"	"	22	" "	1-6
For Sections G-G, H-H, K-K, L-L, M-M & Q-Q	"	"	"	23	" "	1-6
For Section J-J	"	"	"	24	" "	1-6
For Sections N-N, O-O & P-P	"	"	"	25	" "	1-6
For Girder & Column Schedules	"	"	"	26	" "	1-6
For Air Duct Manholes	"	"	"	15	" "	1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 20

AIR DUCTS AT LAND SHAFTS - NEW JERSEY

Ole Singstad
ENGINEER OF DESIGNS

SCALE 0 5 10 FEET

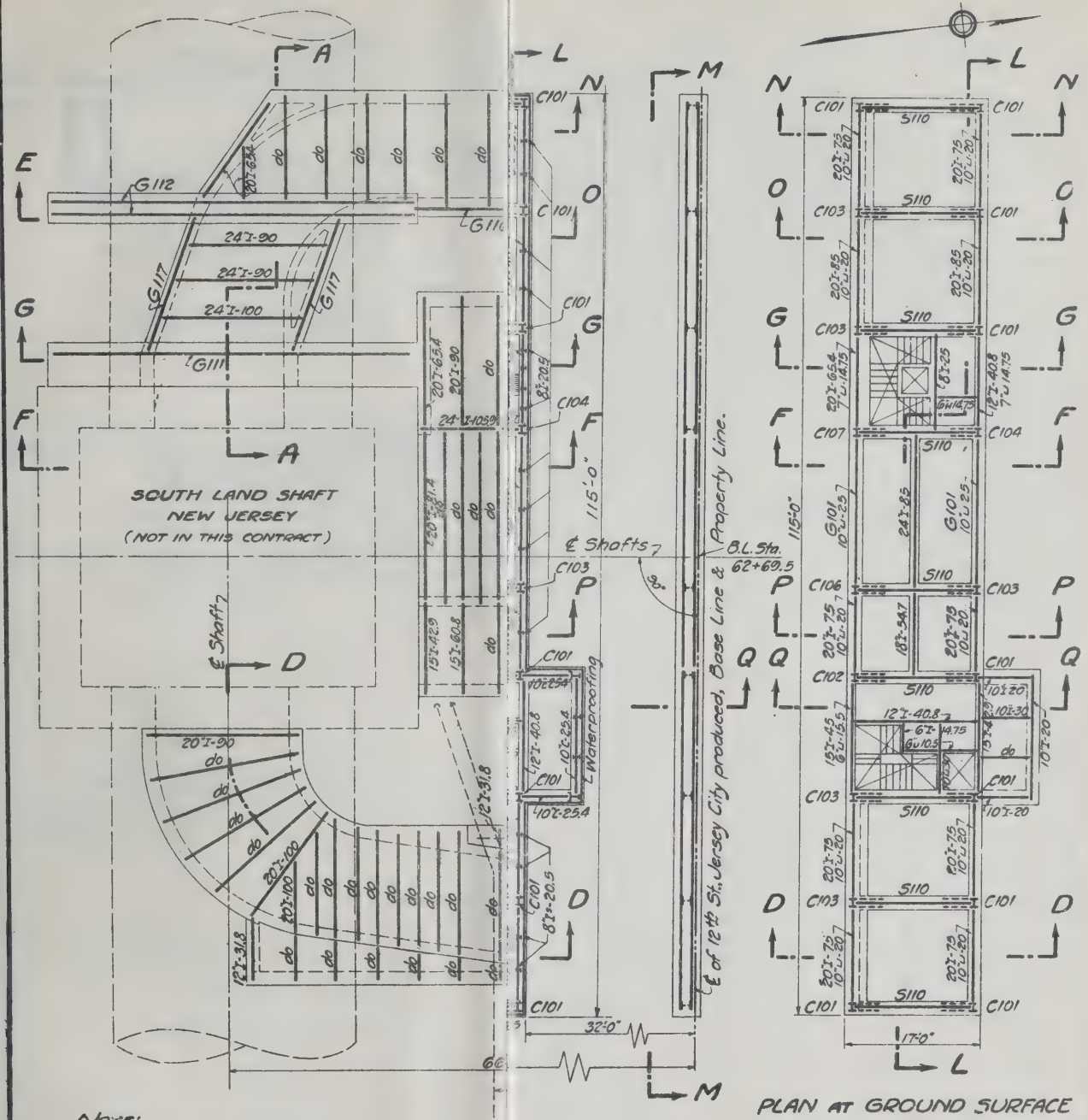
DATE SEPTEMBER 10, 1924

Ole Singstad
CHIEF ENGINEER

DRAWN BY OMJ
CHECKED BY RFS & EW.

FILE No. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.



Note:
Cinder backfill on entire roof to elevation of present ground surface.

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No 21

SCALE: 0 5 10 FEET

DATE: SEPTEMBER 10, 1924

Ole Singstad
ENGINEER OF DESIGNS

C. M. Holland
CHIEF ENGINEER

DRAWN BY R.F.L.
CHECKED BY O.M. E.W.

FILE NO. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.

SOUTH LAND SHAFT
NEW JERSEY
(NOT IN THIS CONTRACT)

NORTH LAND SHAFT
NEW JERSEY
(NOT IN THIS CONTRACT)

℄ Shafts

B.L. Sta 62+69.5 Property Line.

℄ of 12th St. Jersey City produced, Base Line &

115'-0"

66'-4"

2-10" Cast Iron Discharge Pipes to River Bulkhead.

166'-10"

32'-0"

17'-0"

Note:
Cinder backfill on entire roof to elevation of present ground surface.

ROOF PLAN

PLAN AT GROUND SURFACE

For Alinement & Profile	see	Dwg. No.	1	- File No.	1-6
For Foundation Plan	"	"	18	"	1-6
For Invert Plan	"	"	19	"	1-6
For Upper Air Duct Floor Plan	"	"	20	"	1-6
For Sections A-A, B-B, C-C, D-D, E-E & F-F	"	"	22	"	1-6
For Sections G-G, H-H, K-K, L-L, M-M & Q-Q	"	"	23	"	1-6
For Section J-J	"	"	24	"	1-6
For Sections N-N, O-O & P-P	"	"	25	"	1-6
For Girder & Column Schedules	"	"	26	"	1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No 21

AIR DUCTS AT LAND SHAFTS - NEW JERSEY

Ole Singstad
ENGINEER OF DESIGNS

SCALE 0 5 10 FEET

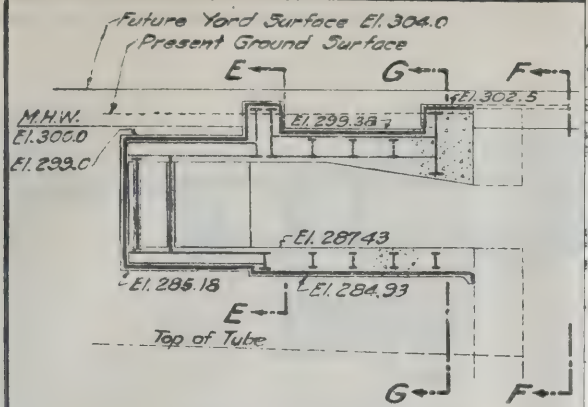
DATE : SEPTEMBER 10, 1924

DRAWN BY P.S.L.
CHECKED BY O.H.S. E.W.

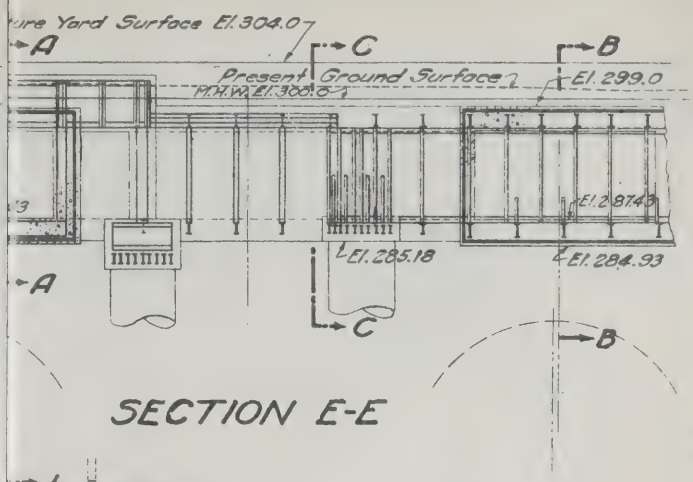
C.H. Hellman
CHIEF ENGINEER

FILE NO. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.



SECTION A-A



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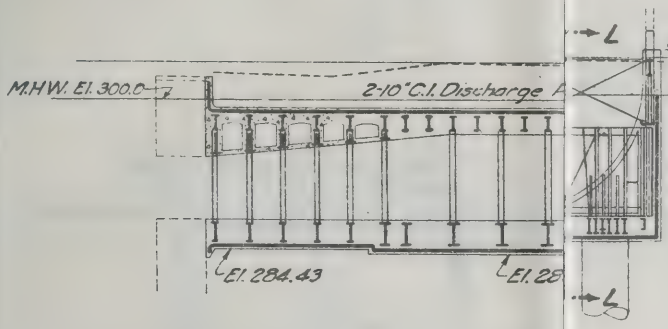
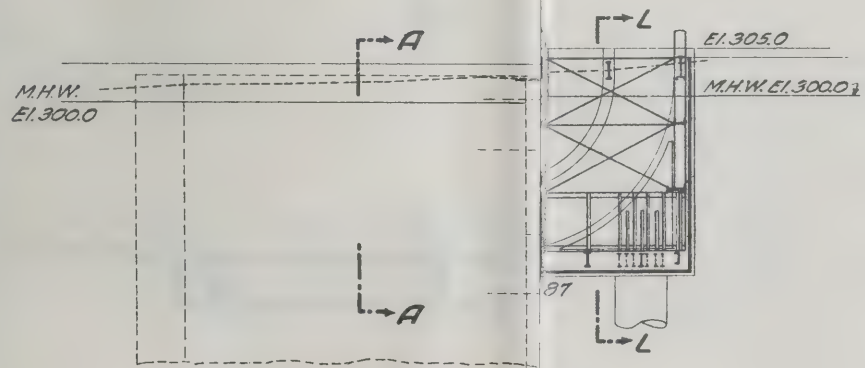
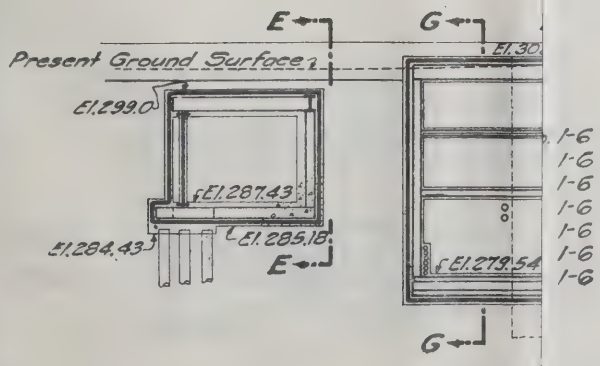


Note-
Cinder back fill on entire roof
to elevation of present ground surface





1-6
1-6
1-6
1-6
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1-6
1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 22

SCALE: 0 5 10 FEET

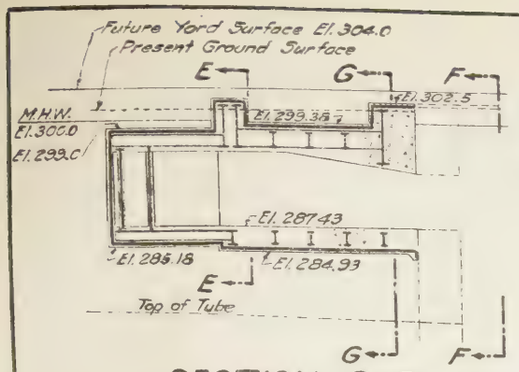
DATE: SEPTEMBER 10, 1924

Ole Singstad
ENGINEER OF DESIGNS

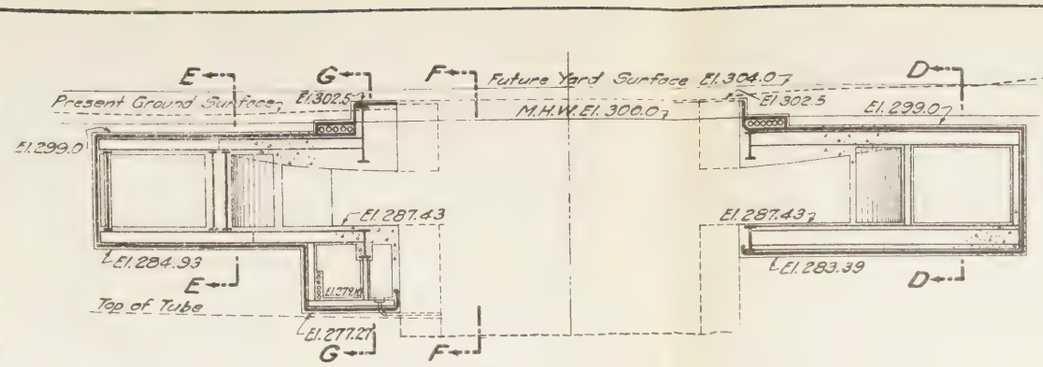
Clifford Holland
CHIEF ENGINEER

DRAWN BY R.F.L.
CHECKED BY O.H.S. E.W.

FILE NO. 1-6



SECTION A-A



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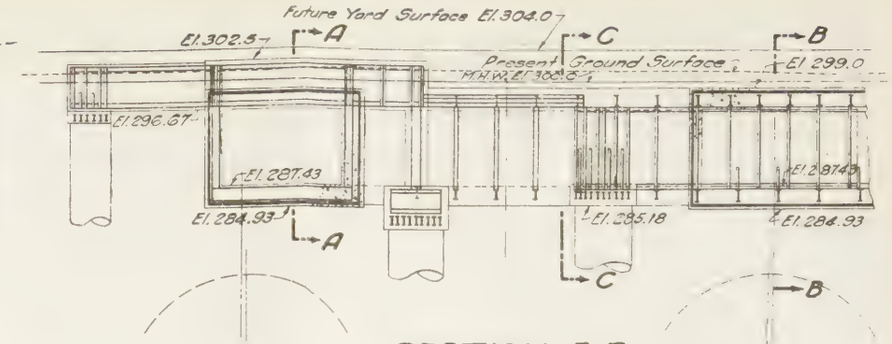
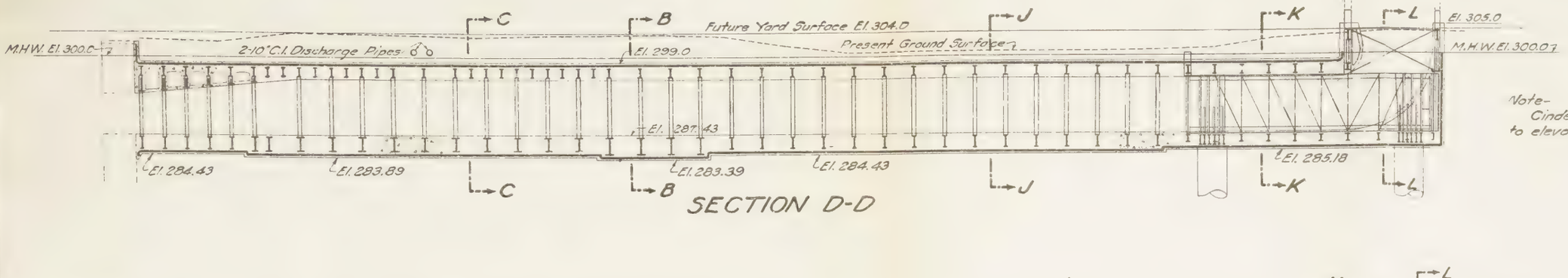
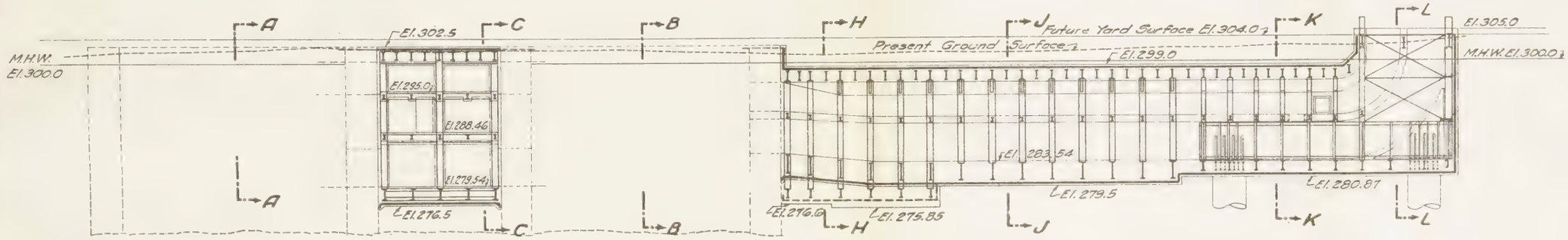


SECTION E-E

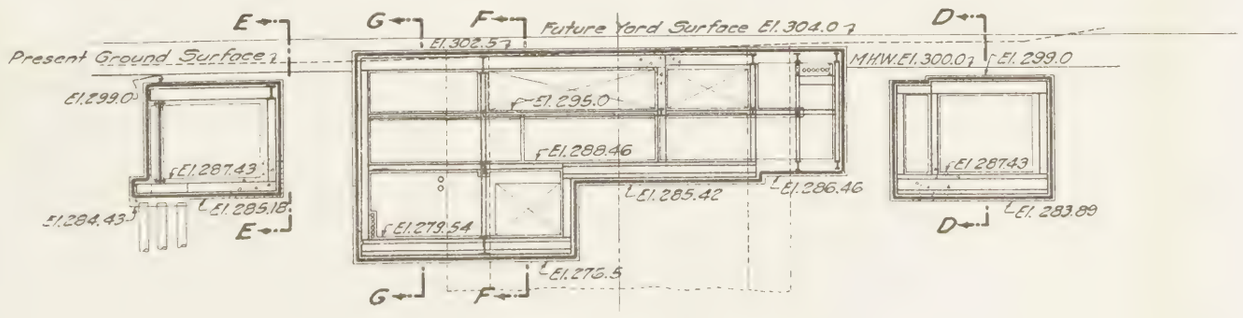


SECTION D-D

Note-
Cinder back fill on entire roof to elevation of present ground surface



SECTION F-F



SECTION C-C

For Alinement & Profile	see	Dw'g	No.	1	File No. 1-6
For Foundation Plan	"	"	"	18	" " 1-6
For Invert Plan	"	"	"	19	" " 1-6
For Upper Air Duct Floor Plan	"	"	"	20	" " 1-6
For Roof Plan	"	"	"	21	" " 1-6
For Section G-G, H-H, K-K & L-L	"	"	"	23	" " 1-6
For Section J-J	"	"	"	24	" " 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 22

AIR DUCTS AT LAND SHAFTS - NEW JERSEY

SCALE: 0 1" FEET

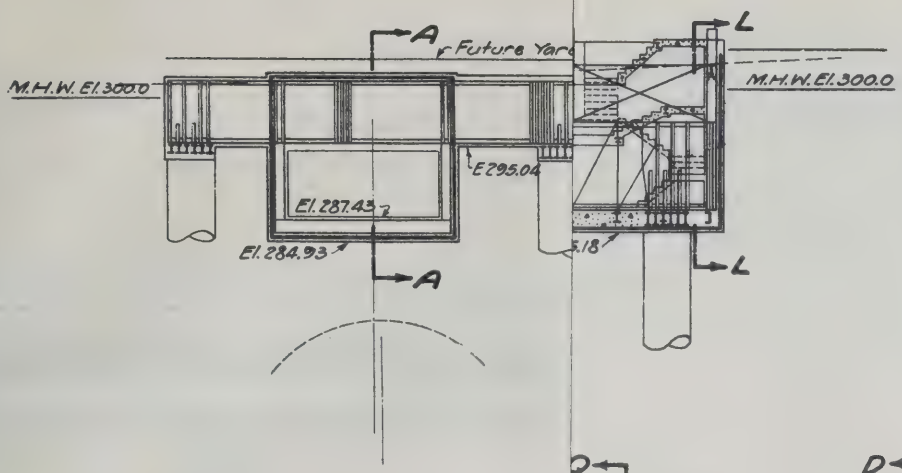
DATE: SEPTEMBER 10, 1924

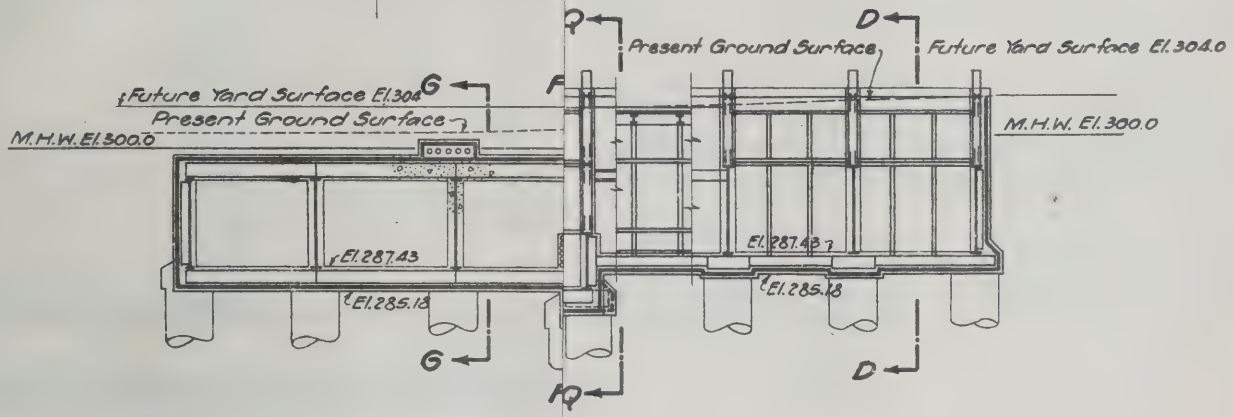
CHIEF ENGINEER

DRAWN BY P.F.S. CHKD. G.W.

FILE No. 1-6

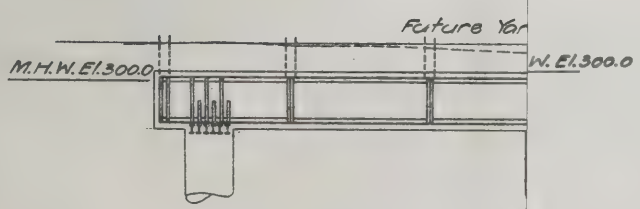
ENGINEER OF DESIGNS

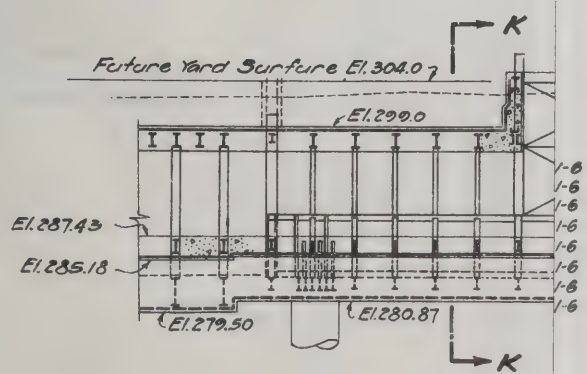




L

Note:
Cinder back fill on entire roof to elevation of present ground surface





SECTION Q

Ole Singstad
ENGINEER OF DESIGNS

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 23

SCALE 0 5 10 SCALE

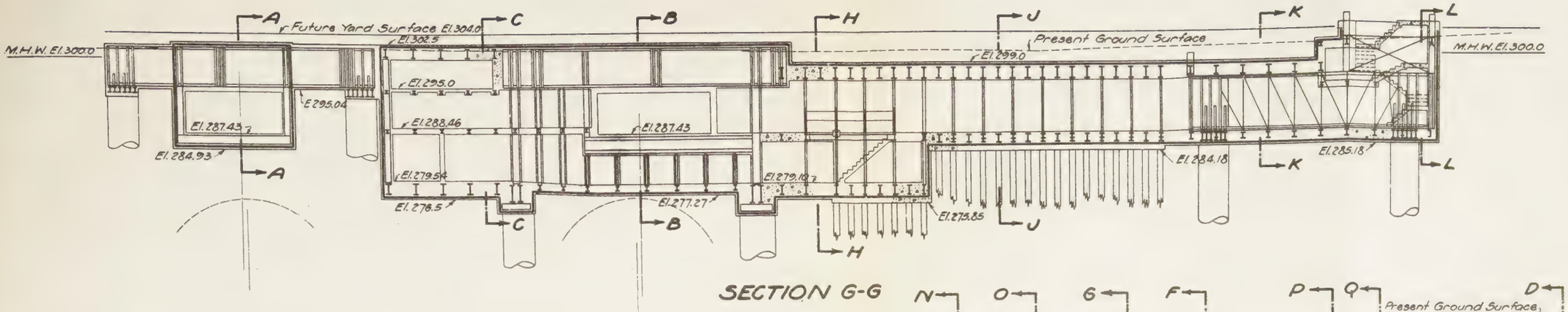
DATE

Clifford Holland
CHIEF ENGINEER

DRAWN BY O.H.S.
CHECKED BY A.F.S. E.H.

FILE NO. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.



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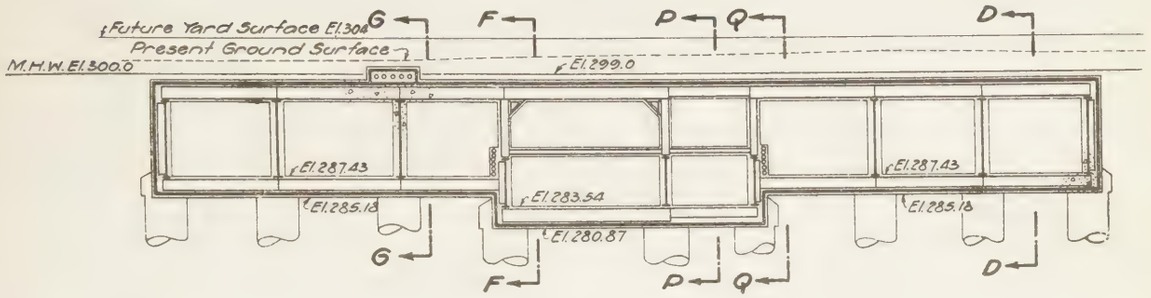

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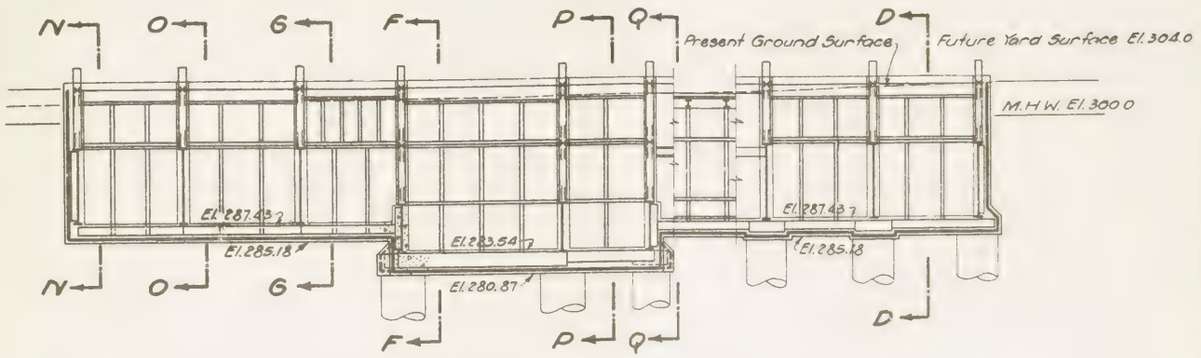

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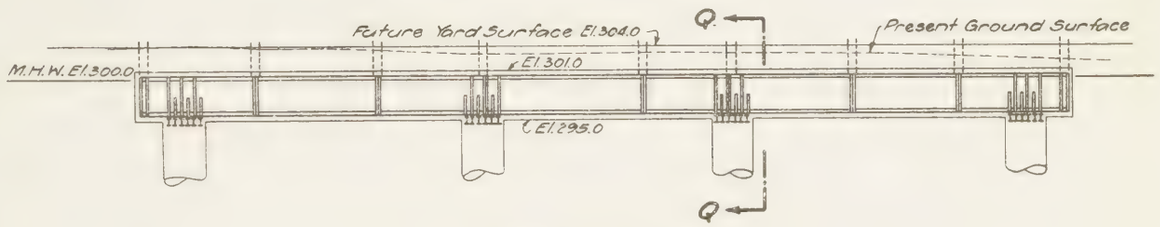

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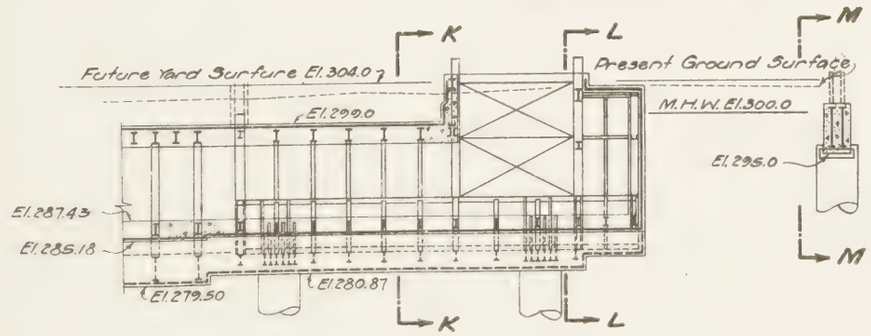

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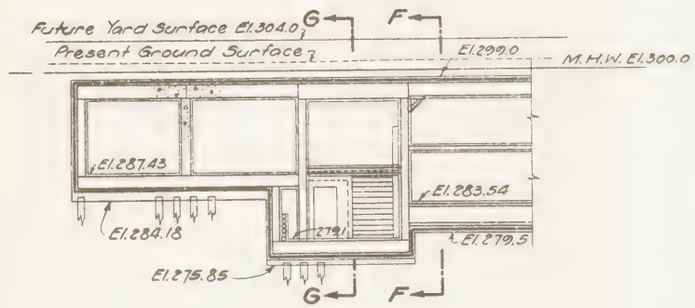


SECTION H-H

Note:
Cinder back fill on entire roof to elevation of present ground surface

For Alinement & Profile	see Dwg.	No.	18	File No.	1-6
For Foundation Plan	"	"	19	"	1-6
For Invert Plan	"	"	20	"	1-6
For Upper Air Duct Floor Plan	"	"	21	"	1-6
For Roof Plan	"	"	22	"	1-6
For Sections A-A, B-B, C-C, D-D, E-E & F-F	"	"	24	"	1-6
For Section J-J	"	"	25	"	1-6
For Section N-N, O-O, & P-P	"	"			

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 23

AIR DUCTS AT LAND SHAFTS - NEW JERSEY

Ole Singstad
ENGINEER OF DESIGNS

SCALE 0 5 10 SCALE

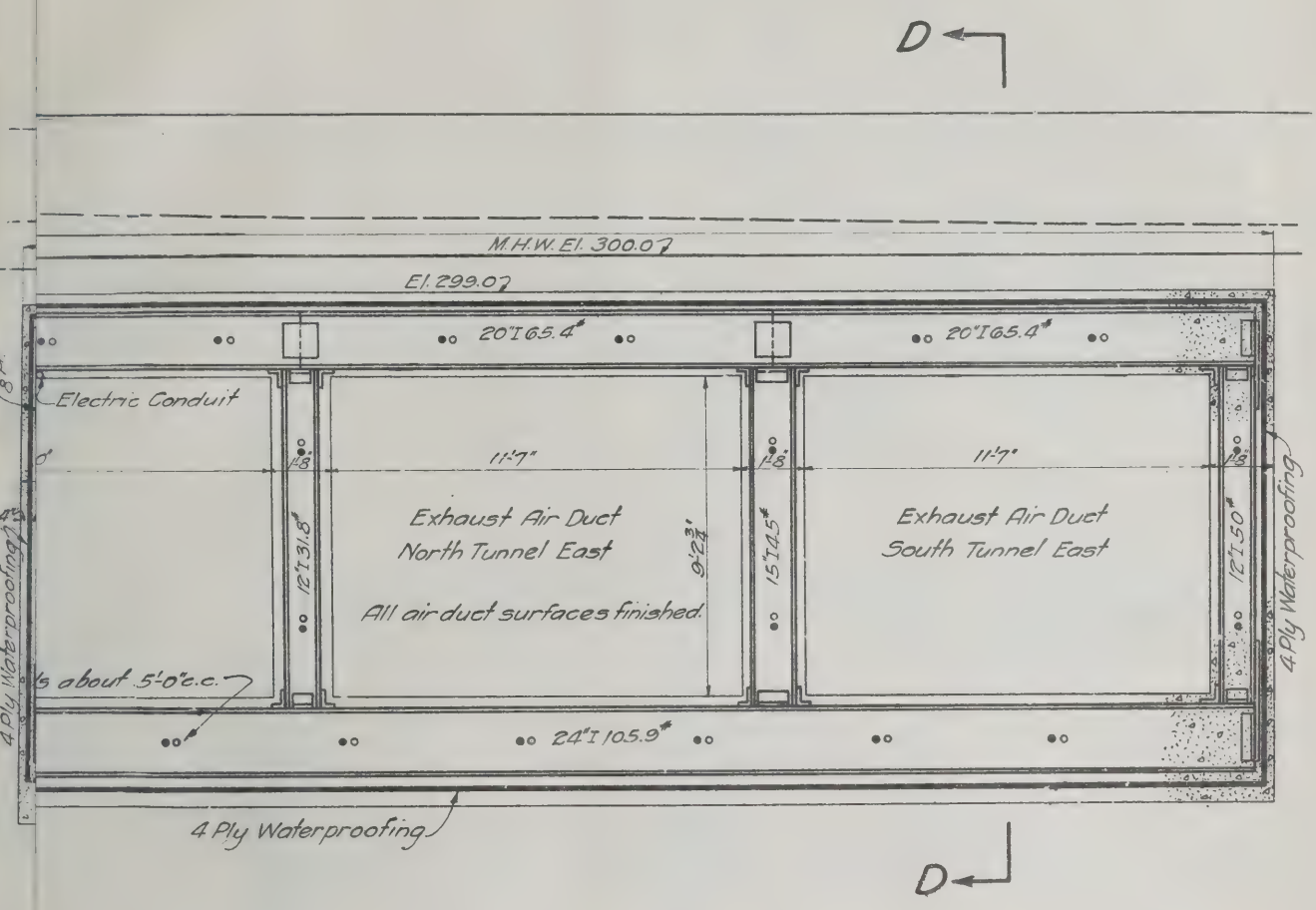
DATE

CHIEF ENGINEER

DRAWN BY CTB
CHECKED BY A.F.S. & A.D.

FILE NO. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.



ent and Profile	see Dwg. No. 1	File No. 1-6	
ation Plan	" " " 18	" " 1-6	
Plan	" " " 19	" " 1-6	
Air Duct Floor Plan	" " " 20	" " 1-6	
Plan	" " " 21	" " 1-6	
ons D-D and F-F	" " " 22	" " 1-6	
on G-G	" " " 23	" " 1-6	
and Column Schedules	" " " 26	" " 1-6	

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 24

SCALE: 0 1 2 3 FEET

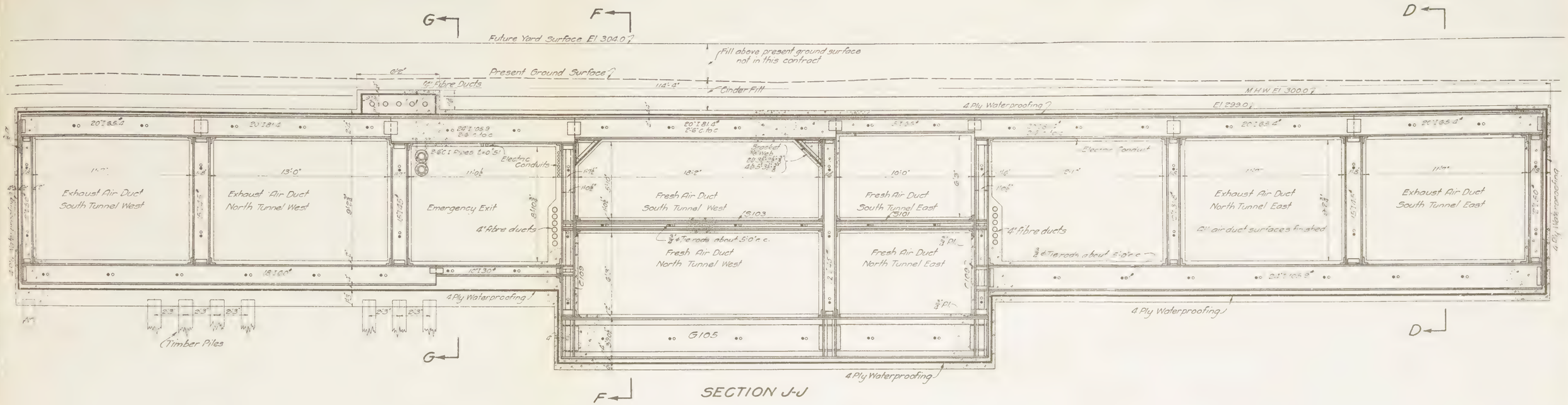
DATE SEPTEMBER 10, 1924.

CHIEF ENGINEER

DRAWN BY O.H.A.
CHECKED BY F.F.S. E.W.

FILE NO. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.



For Alinement and Profile	see Dwg No. 1	File No. 1-G
For Foundation Plan	" " " 18	" " 1-G
For Invert Plan	" " " 19	" " 1-G
For Upper Air Duct Floor Plan	" " " 20	" " 1-G
For Roof Plan	" " " 21	" " 1-G
For Sections D-D and F-F	" " " 22	" " 1-G
For Section G-G	" " " 23	" " 1-G
For Girder and Column Schedules	" 26	" " 1-G

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 24

AIR DUCTS AT LAND SHAFTS NEW JERSEY

SCALE 0 1 2 3 FEET DATE SEPTEMBER 10, 1924

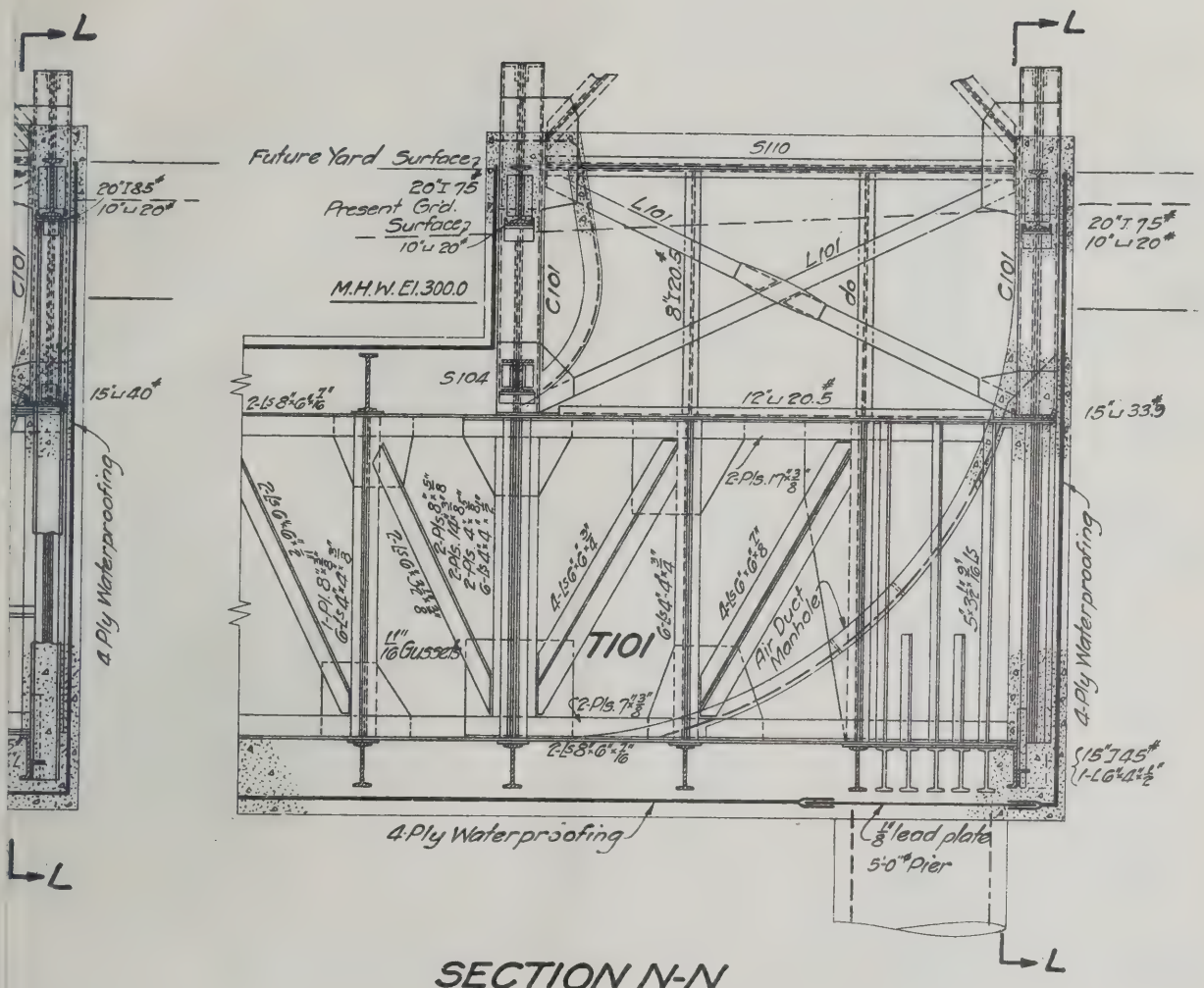
CHIEF ENGINEER

DRAWN BY CHG
CHECKED BY

FILE NO 1-8

Ole Singstad
ENGINEER

M. B. BROWN PRINTING & BINDING CO. N.Y.



	See Dwg. No. 1	File No. 1-6
	" " " 18	" " 1-6
	" " " 19	" " 1-6
	" " " 20	" " 1-6
	" " " 21	" " 1-6
	" " " 23	" " 1-6
dules	" " " 26	" " 1-6
	" " " 15	" " 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 25

SCALE: 0 1 2 3 FEET

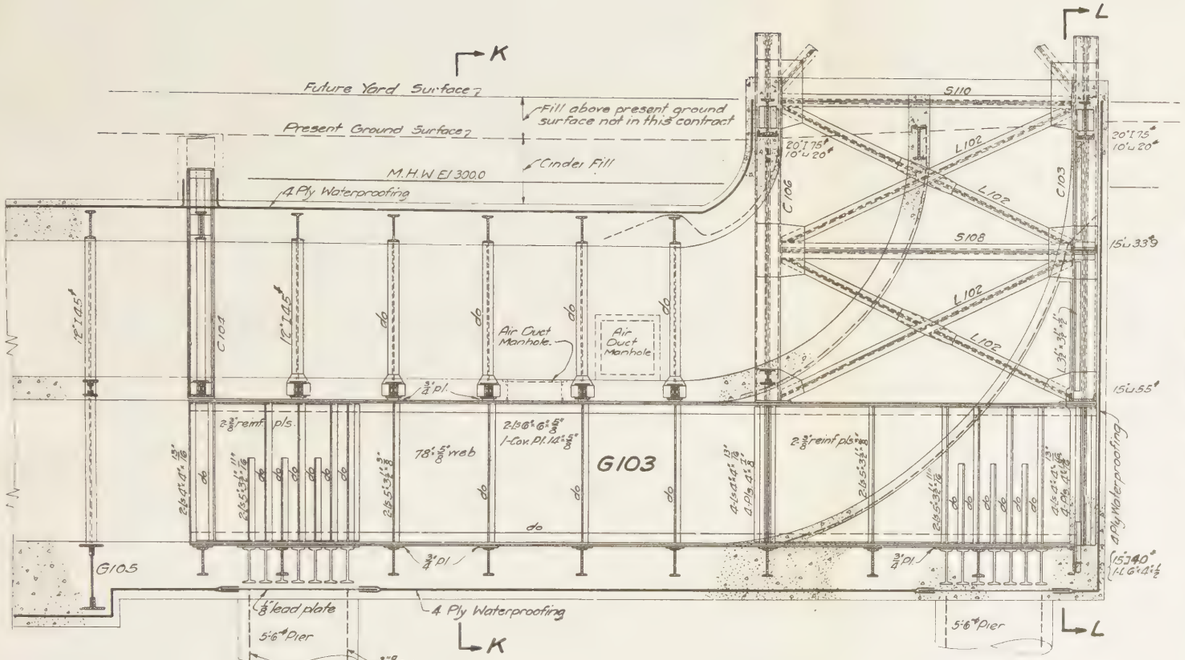
DATE: SEPTEMBER 10, 1924

C. M. Holland
CHIEF ENGINEER

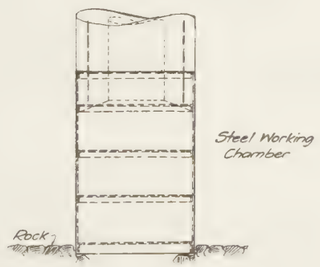
DRAWN BY CTS
CHECKED BY R.S.J. E.W.

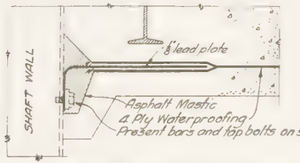
FILE NO.

M. B. BROWN PRINTING & BINDING CO., N. Y.



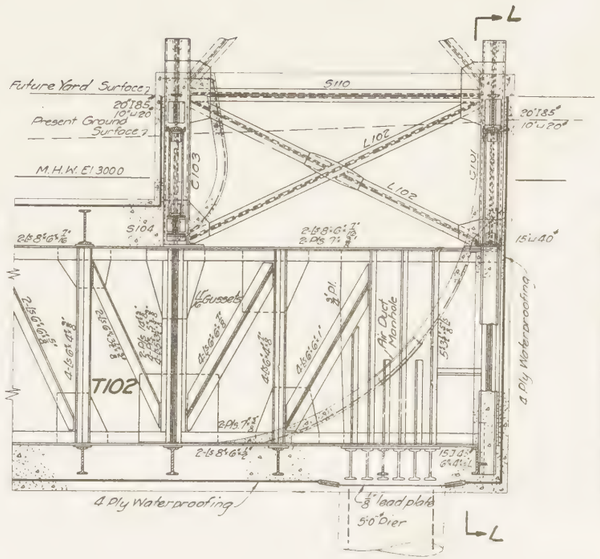
SECTION P-P



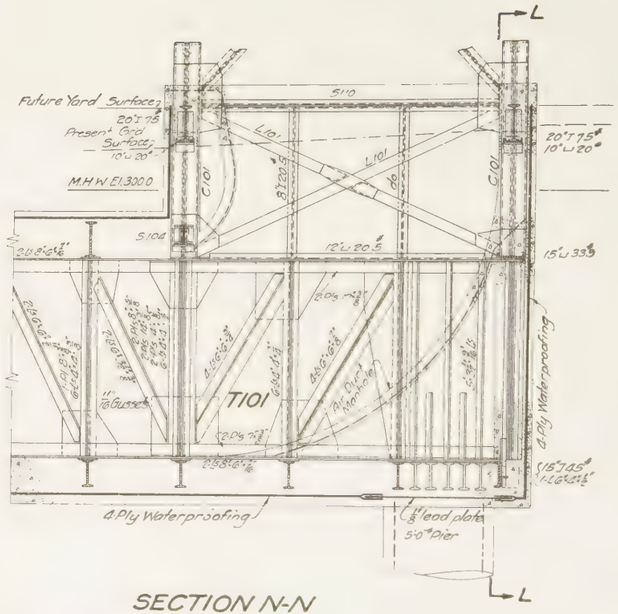


DETAIL OF WATERPROOFING CONNECTION TO SHAFTS

SCALE 0 3 6 9 12" INCHES



SECTION O-O



SECTION N-N

For Alinement and Profile	see Dwg. No.	1	File No. 1-G
For Foundation Plan	" "	18	" " 1-G
For Invert Plan	" "	19	" " 1-G
For Upper Air Duct Floor Plan	" "	20	" " 1-G
For Roof Plan	" "	21	" " 1-G
For Sections K-K and L-L	" "	23	" " 1-G
For Girder and Column Schedules	" "	26	" " 1-G
For Air Duct Manholes	" "	15	" " 1-G

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 25

AIR DUCTS AT LAND SHAFTS-NEW JERSEY

Ole Singstad
ENGINEER OF DESIGNS

SCALE: 0 1 2 FEET

DATE: SEPTEMBER 10, 1924

Clifford Holland
CHIEF ENGINEER

DRAWN BY CMB
CHECKED BY FFS EW

FILE NO

M. B. BROWN PRINTING & BINDING CO., N. Y.

GIRDERS

MARK	WEB	4 L's	COVER PLATES
G 1	36 x 3/8	6x6x 3/4	
G 2	22 x 13/16	6x6x 13/16	14 x 5/8 - 17'-6" lg.
			14 x 1/2 - 14'-6" "
G 3	26 x 5/8	6x6x 13/16	14 x 1/2 - 17'-0" "
			14 x 1/2 - 14'-0" "
G 4	28 x 3/16	6x6x 5/8	14 x 1/2 - 20'-6" "
			14 x 1/2 - 14'-6" "
G 5	30 x 7/16	6x6x 5/8	14 x 5/8 - 16'-0" "
G 6	32 x 1/2	6x6x 9/16	14 x 5/8 - 21'-0" "
G 7	36 x 7/16	8x6x 1/2	
G 8	36 x 3/16	8x6x 15/16	
G 9	36 x 1/2	8x6x 11/16	
G 10	36 x 1/2	8x6x 3/4	
G 11	42 x 5/8	8x6x 5/8	18 x 1/2 - 24'-0" lg.
G 12	36 x 3/16	8x6x 7/8	
G 13	36 x 3/8	3 1/2 x 3 x 3/8	
G 14	22 x 3/8	3 1/2 x 3 x 3/8	
G 15	26 x 3/8	3 1/2 x 3 x 3/8	
G 16	28 x 3/8	3 1/2 x 3 x 3/8	
G 17	30 x 3/8	3 1/2 x 3 x 3/8	
G 18	32 x 3/8	3 1/2 x 3 x 3/8	
G 19	24 x 5/8	6x6x 5/8	14 x 3/8 - 19'-0" lg.
			14 x 3/8 - 14'-6" "
G 20	24 x 5/8	6x6x 5/8	14 x 3/8 - 17'-0" "
G 21	28 x 3/16	8x6x 3/4	18 x 5/8 - 22'-0" "
G 22	24 x 11/16	6x6x 5/8	14 x 7/16 - 19'-0" "
			14 x 7/16 - 15'-0" "
G 23	24 x 3/8	6x6x 5/8	14 x 7/16 - 19'-0" "
			14 x 7/16 - 15'-0" "
G 24	24 x 3/8	6x6x 5/8	14 x 1/2 - 19'-0" "
			14 x 1/2 - 14'-6" "
G 25	32 x 11/16	8x6x 5/8	18 x 3/16 - 19'-0" "
G 26	32 x 11/16	8x6x 5/8	18 x 7/8 - 19'-0" "
G 27	12 x 1/2	6x6x 1/2	
G 28	12 x 5/8	8x6x 11/16	
G 29	24 x 3/4	6x6x 13/16	14 x 1/2 - 19'-0" "
			14 x 1/2 - 15'-0" "
G 30	36 x 11/16	8x6x 3/4	18 x 3/4 - 22'-0" "
G 31	24 x 3/8	3 1/2 x 3 x 3/8	
G 32	28 x 3/8	8x6x 11/16	18 x 5/8 - 22'-0" "
G 33	36 x 3/16	8x6x 3/4	
G 34	24 x 11/16	6x6x 5/8	14 x 1/2 - 19'-0" "
			14 x 1/2 - 15'-0" "
G 35	42 x 5/8	8x6x 5/8	18 x 11/16 - 24'-0" "
G 36	32 x 11/16	8x6x 7/8	18 x 11/16 - 22'-0" "
G 37	32 x 11/16	8x6x 5/8	18 x 1/2 - 19'-0" "
G 38	42 x 11/16	8x6x 7/8	18 x 3/4 - 25'-0" "
G 39	36 x 5/8	8x6x 9/16	18 x 1/2 - 21'-6" "

COLUMNS

MARK	WEB	4 L's	COVER PLATES
C101	12 - 1/2	6 - 4 - 3/8	14 - 3/8
C102	12 - 3/8	6 - 4 - 1/2	14 - 1/2
C103	12 - 1/2	6 - 4 - 5/8	14 - 9/16
C104	12 - 5/8	6 - 4 - 5/8	14 - 11/16
C105	12 - 5/8	6 - 4 - 5/8	14 - 13/16
C106	12 - 3/4	6 - 4 - 1/2	14 - 7/8
C107	12 - 5/8	6 - 4 - 5/8	14 - 1
C108	15I-42.9		1-12"-25
C109	12 - 3/8	5 - 3 1/2 - 3/8	
C110	12 - 3/8	6 - 4 - 5/8	
C111	14 - 1	6 - 6 - 3/4	16 - 2 1/2
C112	14 - 3/4	6 - 6 - 3/4	16 - 2 1/8
C113	12 - 3/8	5 - 3 1/2 - 1/2	
C114	10 - 3/8	6 - 4 - 5/8	
C115	12 - 3/8	6 - 4 - 3/4	14 - 1

STRUTS

MARK	WEB	4 L's
S101	8 - 3/8	4 - 3 - 7/8
S102	8 - 3/8	4 - 3 - 7/16
S103	8 - 3/8	4 - 3 - 1/2
S104	10 - 3/8	5 - 3 1/2 - 3/8
S105	6 - 3/8	4 - 3 - 9/16
S106	6 - 3/8	4 - 3 - 3/8
S107	Lacing	5 - 3 - 7/16
S108	"	5 - 3 - 3/8
S109	"	4 - 3 - 3/8
S110	"	3 - 3 - 3/8

BRACING

MARK	MATERIAL
L101	2 Pls. 6 - 3/8
L102	4 L's 3 1/2 - 3 - 3/8 laced

SHAFTS - NEW JERSEY

NORTH & SOUTH

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 26

DATE: SEPTEMBER 10, 1924

Ole Singstad
ENGINEER OF DESIGNS

Clifford Holland
CHIEF ENGINEER

DRAWN BY OHS
CHECKED BY R.F.S. A.W.

FILE NO. 1-6

GIRDERS

MARK	WEB	4 L's	COVER PLATES
G 1	36 x 3/8	6 x 6 x 3/4	
G 2	22 x 15/16	6 x 6 x 13/16	14 x 3/8 - 17'-6" lg
			14 x 1/2 - 14'-6" "
G 3	26 x 7/8	6 x 6 x 13/16	14 x 3/4 - 17'-0" "
			14 x 1/2 - 14'-0" "
G 4	28 x 15/16	6 x 6 x 7/8	14 x 1/2 - 20'-6" "
			14 x 3/8 - 14'-6" "
G 5	30 x 15/16	6 x 6 x 7/8	14 x 3/4 - 16'-0" "
G 6	32 x 1	6 x 6 x 15/16	14 x 7/8 - 21'-0" "
G 7	36 x 15/16	8 x 6 x 7/8	
G 8	36 x 15/16	8 x 6 x 15/16	
G 9	36 x 1	8 x 6 x 11/16	
G 10	36 x 1/2	8 x 6 x 7/8	
G 11	42 x 5/8	8 x 6 x 3/4	18 x 1/2 - 24'-0" lg
G 12	36 x 13/16	8 x 6 x 7/8	
G 13	36 x 5/8	3 1/2 x 3 x 3/8	
G 14	22 x 3/8	3 1/2 x 3 x 3/8	
G 15	26 x 3/8	3 1/2 x 3 x 3/8	
G 16	28 x 3/8	3 1/2 x 3 x 3/8	
G 17	30 x 3/8	3 1/2 x 3 x 3/8	
G 18	32 x 3/8	3 1/2 x 3 x 3/8	
G 19	24 x 5/8	6 x 6 x 5/8	14 x 3/8 - 19'-0" lg
			14 x 3/4 - 14'-6" "
G 20	24 x 5/16	6 x 6 x 3/8	14 x 5/8 - 17'-0" "
G 21	28 x 5/16	8 x 6 x 3/4	18 x 3/8 - 22'-0" "
G 22	24 x 11/16	6 x 6 x 5/8	14 x 7/16 - 19'-0" "
			14 x 7/16 - 15'-0" "
G 23	24 x 1/2	6 x 6 x 5/8	14 x 7/16 - 19'-0" "
			14 x 7/16 - 15'-0" "
G 24	24 x 3/8	6 x 6 x 3/8	14 x 1/2 - 19'-0" "
			14 x 1/2 - 14'-6" "
G 25	32 x 11/16	8 x 6 x 3/8	18 x 5/16 - 19'-0" "
G 26	32 x 11/16	8 x 6 x 7/8	18 x 3/4 - 19'-0" "
G 27	12 x 1/2	6 x 6 x 1/2	
G 28	12 x 3/8	8 x 6 x 15/16	
G 29	24 x 3/4	6 x 6 x 13/16	14 x 1/2 - 19'-0" "
			14 x 1/2 - 15'-0" "
G 30	36 x 11/16	8 x 6 x 3/4	18 x 3/4 - 22'-0" "
G 31	24 x 3/8	3 1/2 x 3 x 3/8	
G 32	28 x 3/8	8 x 6 x 11/16	18 x 3/8 - 22'-0" "
G 33	36 x 5/16	8 x 6 x 3/4	
G 34	24 x 11/16	6 x 6 x 7/8	14 x 1/2 - 19'-0" "
			14 x 1/2 - 15'-0" "
G 35	42 x 5/8	8 x 6 x 7/8	18 x 11/16 - 24'-0" "
G 36	32 x 11/16	8 x 6 x 3/4	18 x 11/16 - 22'-0" "
G 37	32 x 11/16	8 x 6 x 5/8	18 x 1/2 - 19'-0" "
G 38	42 x 11/16	8 x 6 x 7/8	18 x 3/4 - 25'-0" "
G 39	36 x 3/4	8 x 6 x 3/16	18 x 1/2 - 21'-6" "

COLUMNS

MARK	WEB	4 L's	COVER PLATES
C 1	12 x 7/16	6 x 6 x 7/16	
C 2	12 x 1/2	6 x 6 x 7/16	
C 3	12 x 1/2	6 x 6 x 1/2	
C 4	12 x 7/16	6 x 6 x 7/16	
C 5	12 x 9/16	6 x 6 x 1/2	
C 6	14 x 1/2	8 x 6 x 5/8	
C 7	14 x 1/2	6 x 6 x 1/2	
C 8	14 x 7/16	6 x 6 x 7/16	
C 9	14 x 7/16	6 x 6 x 7/16	
C 10	14 x 5/8	6 x 6 x 1/2	
C 11	14 x 5/8	6 x 6 x 5/8	
C 12	14 x 5/8	6 x 6 x 9/16	
C 13	14 x 5/8	6 x 6 x 11/16	
C 14	18 x 9/16	8 x 6 x 3/4	
C 15	22 x 11/16	8 x 6 x 5/8	
C 16	22 x 1/2	6 x 6 x 5/8	1-15" ℄ 33.9#
C 17	22 x 3/16	8 x 6 x 11/16	
C 18	15# 60.8#		1-10" ℄ 15.3#
C 19	6 x 3/8	5 x 3 x 7/16	
C 20	8 x 3/8	5 x 3 1/2 x 7/16	
C 21	12 x 9/16	6 x 6 x 9/16	
C 22	12 x 5/8	6 x 6 x 1/2	
C 23	12 x 5/8	6 x 6 x 7/16	
C 24	14 x 7/16	8 x 6 x 3/8	
C 25	14 x 1/2	6 x 6 x 9/16	
C 26	6 x 3/8	5 x 3 x 1/2	
C 27	6 x 3/8	5 x 3 x 3/8	
C 28	14 x 1/2	6 x 6 x 1/2	
C 29	14 x 9/16	6 x 6 x 5/8	
C 30	14 x 7/16	6 x 6 x 11/16	
C 31	14 x 3/8	6 x 6 x 3/8	
C 32	14 x 11/16	6 x 6 x 11/16	
C 33	14 x 11/16	6 x 6 x 1/2	
C 34	22 x 1/16	8 x 6 x 7/16	

STRUTS

MARK	WEB	4 L's	
S 1	6 x 3/8	3 1/2 x 3 x 3/8	
S 2	6 x 1/2	5 x 3 x 7/16	
S 3	6 x 3/8	4 x 3 x 3/8	

NORTH & SOUTH TUNNELS - NEW JERSEY

GIRDERS

MARK	WEB	4 L's	COVER PLATES
G101	24 - 3/8	6 - 6 - 3/8	
G102	78 - 11/16	6 - 6 - 3/4	14 - 3/8 - full lgth.
	2 - R.P. 78 - 3/4 - 50' - N. End 2 - " " 78 - 3/4 - 80'-S. "		
G103	78 - 3/4	6 - 6 - 5/16	14 - 3/8 " "
	2 - R.P. 78 - 1/2 - 50'-N. End 2 - " " 78 - 1/2 - 80'-S. "		
G104	78 - 3/4	6 - 6 - 7/16	14 - 3/8 " "
	2 - R.P. 78 - 3/4 - 50'-N. End 2 - " " 78 - 3/4 - 80'-S. "		
G105	36 - 11/16	6 - 6 - 3/8	
G106	78 - 1/2	8 - 8 - 1/8	18 - 3/8 - full lgth.
			18 - 3/8 - 24'-0"
			18 - 3/8 - 20'-0"
			18 - 1/2 - 15'-0"
			18 - 3/8 - 10'-0"
G107	36 - 1/2	6 - 6 - 3/8	14 - 1/2 - 19'-0"
	4 - R.P. 34 - 3/8 - 6'-0"		14 - 3/8 - 13'-0"
G108	36 - 3/8	6 - 6 - 3/8	
G109	36 - 1 1/16	6 - 6 - 3/8	
G110	114 - 1/8	6 - 6 - 11/16	
G111	78 - 1/2	8 - 8 - 1/8	18 - 3/8 - full lgth.
			18 - 3/8 - 20'-0"
			18 - 3/8 - 15'-0"
			18 - 3/8 - 9'-0"
G112	60 - 7/8	6 - 6 - 1	14 - 3/8 - full lgth.
	2 - R.P. 58 - 3/16 - 50'-N. End		14 - 3/8 - 30'-0"
			14 - 3/8 - 25'-0"
			14 - 3/8 - 21'-0"
			14 - 3/8 - 16'-0"
			14 - 1/2 - 11'-0"
G113	30 - 3/8	6 - 6 - 3/8	
G114	24 - 3/8	6 - 6 - 1	
G115	24 - 3/8	6 - 6 - 3/8	
G116	20 - 1/2	6 - 6 - 3/4	14 - 1/2 - 13'-0"
			14 - 3/8 - 8'-0"
G117	20 - 1/2	6 - 6 - 3/8	14 - 1/2 - 13'-0"
	ARP 18 - 3/8 - 6'-0"		14 - 3/8 - 10'-0"
G118	36 - 11/16	6 - 6 - 3/8	
G119	114 - 3/8	6 - 6 - 1/2	
G120	36 - 1 3/4	6 - 6 - 3/8	
G121	36 - 1 3/8	6 - 6 - 3/8	
G122	36 - 1 1/2	6 - 6 - 3/8	
G123	18 - 3/8	6 - 6 - 3/8	14 - 3/8 - 16'-0"
			14 - 3/8 - 12'-0"

COLUMNS

MARK	WEB	4 L's	COVER PLATES
C101	12 - 3/8	6 - 4 - 3/8	14 - 3/8
C102	12 - 3/8	6 - 4 - 3/8	14 - 3/8
C103	12 - 3/8	6 - 4 - 3/8	14 - 9/16
C104	12 - 3/8	6 - 4 - 3/8	14 - 11/16
C105	12 - 3/8	6 - 4 - 3/8	14 - 13/16
C106	12 - 3/8	6 - 4 - 3/8	14 - 15/16
C107	12 - 3/8	6 - 4 - 3/8	14 - 1
C108	15#-42.9#		1-12"℄-25
C109	12 - 3/8	5 - 3 1/2 - 3/8	
C110	12 - 3/8	6 - 4 - 3/8	
C111	14 - 1	6 - 6 - 3/8	16 - 2 1/8
C112	14 - 3/8	6 - 6 - 3/8	16 - 2 3/8
C113	12 - 3/8	5 - 3 1/2 - 3/8	
C114	10 - 3/8	6 - 4 - 3/8	
C115	12 - 3/8	6 - 4 - 3/8	14 - 1

STRUTS

MARK	WEB	4 L's
S101	8 - 3/8	4 - 3 - 5/16
S102	8 - 3/8	4 - 3 - 7/16
S103	8 - 3/8	4 - 3 - 1/2
S104	10 - 3/8	5 - 3 1/2 - 3/8
S105	6 - 7/16	4 - 3 - 7/16
S106	6 - 7/16	4 - 3 - 5/16
S107	Lacing	5 - 3 - 7/16
S108	"	5 - 3 - 5/16
S109	"	4 - 3 - 7/16
S110	"	3 - 3 - 5/16

BRACING

MARK	MATERIAL
L101	2 Pls. 6 - 3/8
L102	4 L's 3 1/2 - 3 - 5/16 laced

AIR DUCTS AT LAND SHAFTS - NEW JERSEY

For Alinement & Profile see Drwg. No. 1 - File No. 1-6
For Location of Members for North & South Tunnels see Drwgs. Nos. 4 - 9 - File No. 1-6
For Location of Members for Air Ducts at Land Shaft see Drwgs Nos. 18 - 25 - File No. 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 26

GIRDER AND COLUMN SCHEDULES

O. H. Ingstad
ENGINEER OF DESIGNS

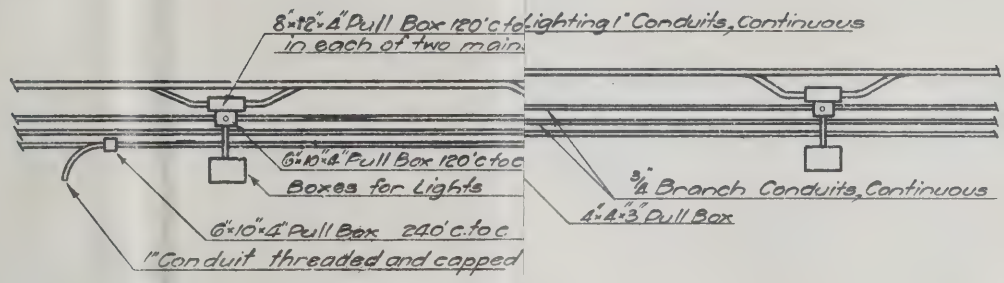
DATE: SEPTEMBER 10, 1926
Ollie Holland
CHIEF ENGINEER

DRAWN BY OHG
CHECKED BY [illegible]

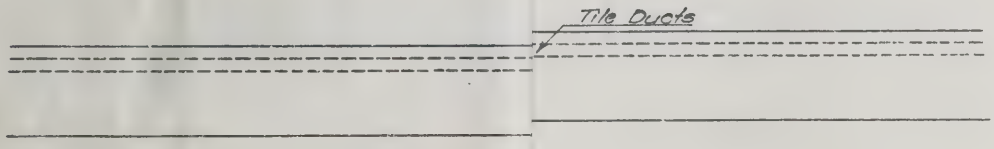
FILE NO 1-6

	TH TUNNEL		SOUTH TUNNEL	
	From Sta. to Sta.		Spacing	From Sta. to Sta.
	" 9+70 - 16+43		20'	
			15'	13+12 - 14+08.5
			10'	10+12 - 13+12

inguisher, Fire Alarm, Telephone & Signal


8"×12"×4" Pull Box 120'c.to c. lighting 1" Conduits, Continuous
in each of two main
6"×10"×4" Pull Box 120'c.to c
Boxes for Lights
6"×10"×4" Pull Box 240'c.to c
1" Conduit threaded and capped
3/4 Branch Conduits, Continuous
4"×4"×3" Pull Box

Niche



	see drwg.	No. 1	File	No. 1-6
trical Conduit System	" "	" 28	"	" 1-6
	" "	" 29	"	" 1-6
	" "	" 30	"	" 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6

CONTRACT DRAWING No. 27

SCALE: Not to Scale Diagramatic

DATE: SEPTEMBER 10, 1924

Ole Singstad
ENGINEER OF DESIGNS

DRAWN BY
CHECKED BY

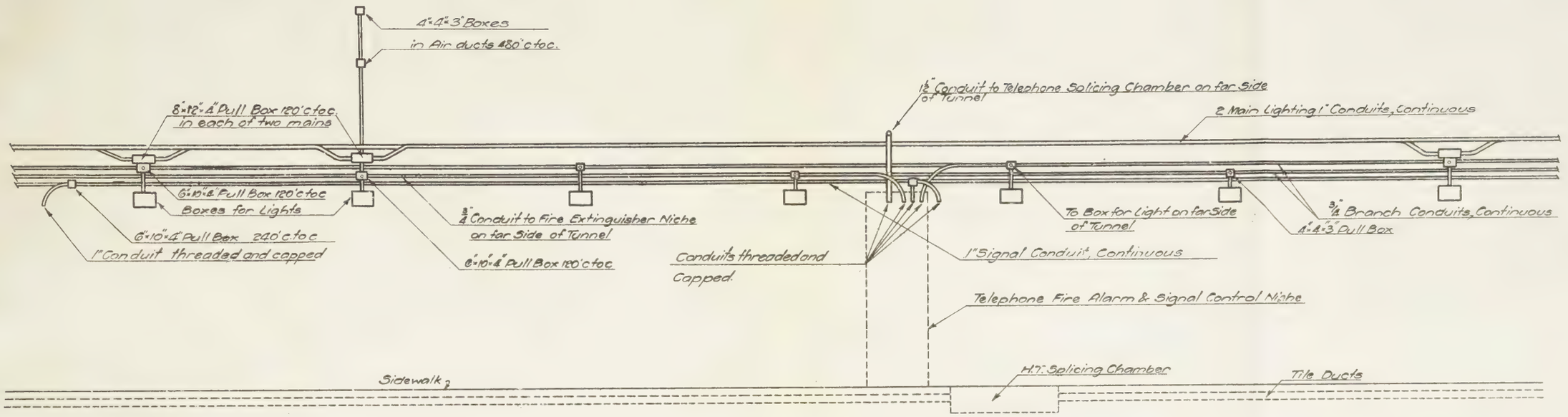
Clifford Holland
CHIEF ENGINEER

FILE No. 1-6

M. B. BROWN PRINTING & BINDING CO. N. Y.

	NORTH TUNNEL		SOUTH TUNNEL	
	Spacing	From Sta. to Sta.	Spacing	From Sta. to Sta.
Boxes for Lights	20'	- 9+70-16+43	20'	
			15'	- 13+12 - 14+08.5
			10'	- 10+12 - 13+12

For Spacing of Niches for Fire Extinguisher, Fire Alarm, Telephone & Signal Control. See Dwg. No. 14 File No. I-8


4"×4"×3" Boxes
in Air ducts 480' c to c.
8"×12"×4" Pull Box 120' c to c. in each of two mains
1½" Conduit to Telephone Splicing Chamber on far Side of Tunnel
2 Main Lighting 1" Conduits, Continuous
6"×10"×4" Pull Box 120' c to c Boxes for Lights
6"×10"×4" Pull Box 240' c to c
1" Conduit threaded and capped
¾" Conduit to Fire Extinguisher Niche on far Side of Tunnel
6"×10"×4" Pull Box 120' c to c
Conduits threaded and Capped
To Box for Light on far Side of Tunnel
¾" Branch Conduits, Continuous
4"×4"×3" Pull Box
1" Signal Conduit, Continuous
Telephone Fire Alarm & Signal Control Niche
Sidewalk
H.T. Splicing Chamber
Tile Ducts

ELEVATION SIDEWALK SIDE OF TUNNEL
INSIDE OF PORTAL

For Alinement and Profile ..... see drwg. No. 1 File No. I-6
For Cross Sections of Electrical Conduit System ..... " " - 28 - " I-6
For Detail of Light Box ..... " " - 29 - " I-6
For Detail of Pull Boxes ..... " " 30 " -6

ELECTRICAL CONDUIT SYSTEM

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

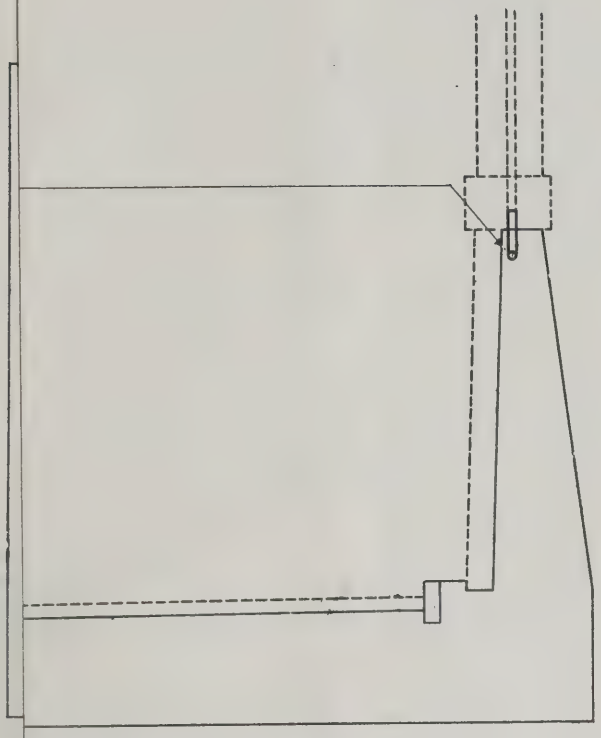
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 27

SCALE: Not to Scale Diagramatic
DATE: SEPTEMBER 10, 1924
DRAWN BY
CHECKED BY
FILE No. I-6

Ole Singstad
ENGINEER OF DESIGNS

CHIEF ENGINEER

M. B. BROWN PRINTING & BINDING CO. N. Y.



UTSIDE OF PORTAL

Drg. No. 1 File No. 1-6
" " 27 " " 1-6
" 29 " " 1-6
" 30 " " 1-6

TEM

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 28

SCALE: 0 1 2 3 FEET.

DATE: SEPTEMBER 10, 1924

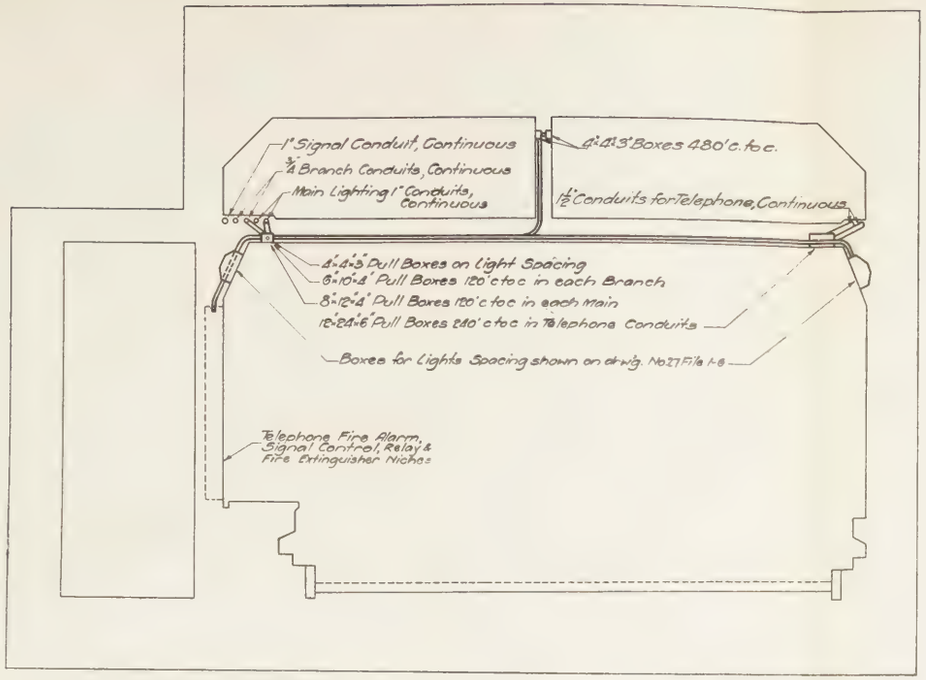
Ole Singstad
ENGINEER OF DESIGNS

Clifford Holland
CHIEF ENGINEER

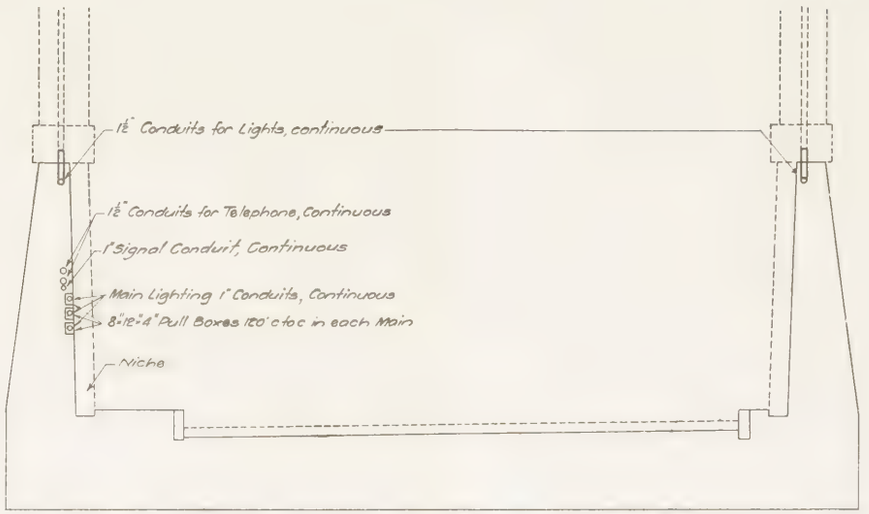
DRAWN BY F.H.
CHECKED BY A.C.D. A.N.O.

FILE NO. 1-6

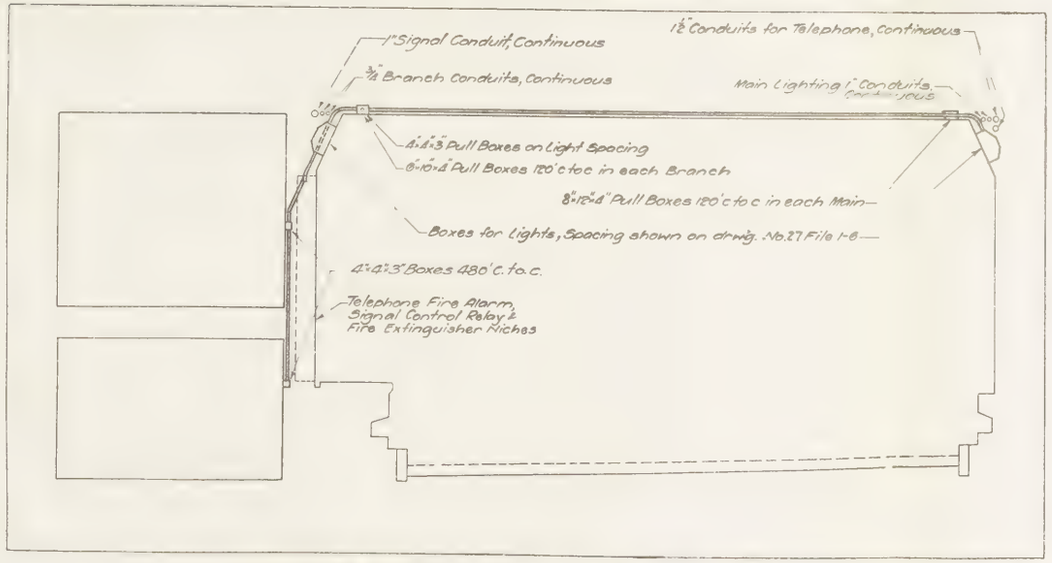
M. B. BROWN PRINTING & BINDING CO. N. Y.


1" Signal Conduit, Continuous
¾" Branch Conduits, Continuous
Main Lighting 1" Conduits, Continuous
4'-4'-3" Boxes 480' c. to c.
1½" Conduits for Telephone, Continuous
4'-4'-3" Pull Boxes on Light Spacing
6'-10'-4" Pull Boxes 120' c to c in each Branch
8'-12'-4" Pull Boxes 120' c to c in each Main
12'-24'-6" Pull Boxes 240' c to c in Telephone Conduits
Boxes for Lights Spacing shown on drwg. No. 27 File 1-6
Telephone Fire Alarm, Signal Control, Relay & Fire Extinguisher Niches

CROSS SECTION AIR DUCTS ON TOP & SIDE


1½" Conduits for Lights, continuous
1½" Conduits for Telephone, Continuous
1" Signal Conduit, Continuous
Main Lighting 1" Conduits, Continuous
8'-12'-4" Pull Boxes 120' c to c in each Main
Niche

CROSS SECTION OUTSIDE OF PORTAL


1" Signal Conduit, Continuous
¾" Branch Conduits, Continuous
1½" Conduits for Telephone, Continuous
Main Lighting 1" Conduits, Continuous
4'-4'-3" Pull Boxes on Light Spacing
6'-10'-4" Pull Boxes 120' c to c in each Branch
8'-12'-4" Pull Boxes 120' c to c in each Main
Boxes for Lights, Spacing shown on drwg. No. 27 File 1-6
4'-4'-3" Boxes 480' c. to c.
Telephone Fire Alarm, Signal Control Relay & Fire Extinguisher Niches

CROSS SECTION AIR DUCTS ON SIDE

For Alinement and Profile, ... see Drg. No. 1 File No. 1-6
For Elevation of Electrical Conduit System, " " " 27 " " 1-6
For Detail of Light Box ..... " " " 29 " " 1-6
For Detail of Pull Boxes ..... " " " 30 " " 1-6

ELECTRICAL CONDUIT SYSTEM

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 28

SCALE: 0 1 2 3 FEET. DATE: SEPTEMBER 10, 1924.

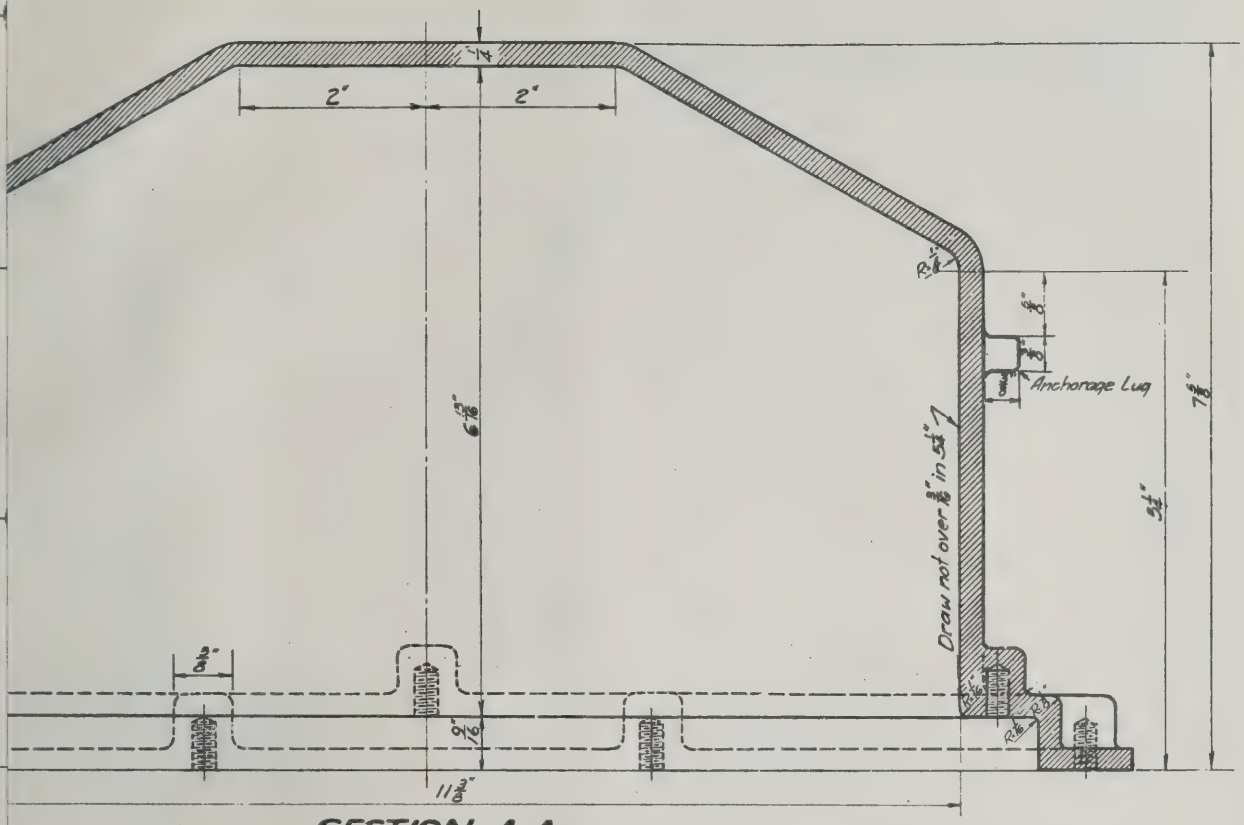
DRAWN BY [illegible]
CHECKED BY [illegible]

CHIEF ENGINEER

FILE NO. 1-6

ENGINEER OF RECORDS

M. B. BROWN PRINTING & BINDING CO. N. Y.



For Alinement & Profile	see	Dwg.	No. 1	File	No 1-6
For Structural Plans	-	-	- 4-12 -	-	1-6
For Electrical Conduit System	-	-	- 27-30 -	-	1-6

galvanized inside and out.
ds to be clean and sharp, free
and protected by rust proof

marked "S" to be free of burrs
ns and to be ground if necessary.
d holes to be drilled to template
he Commissions to insure perfect
e Frame and Cover.
s shown thus 5½" must be exact.
wn thus are ¾" holes for attaching
d are to be located approximately

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 29

SCALE: 1" INCHES. DATE: SEPTEMBER 10, 1924

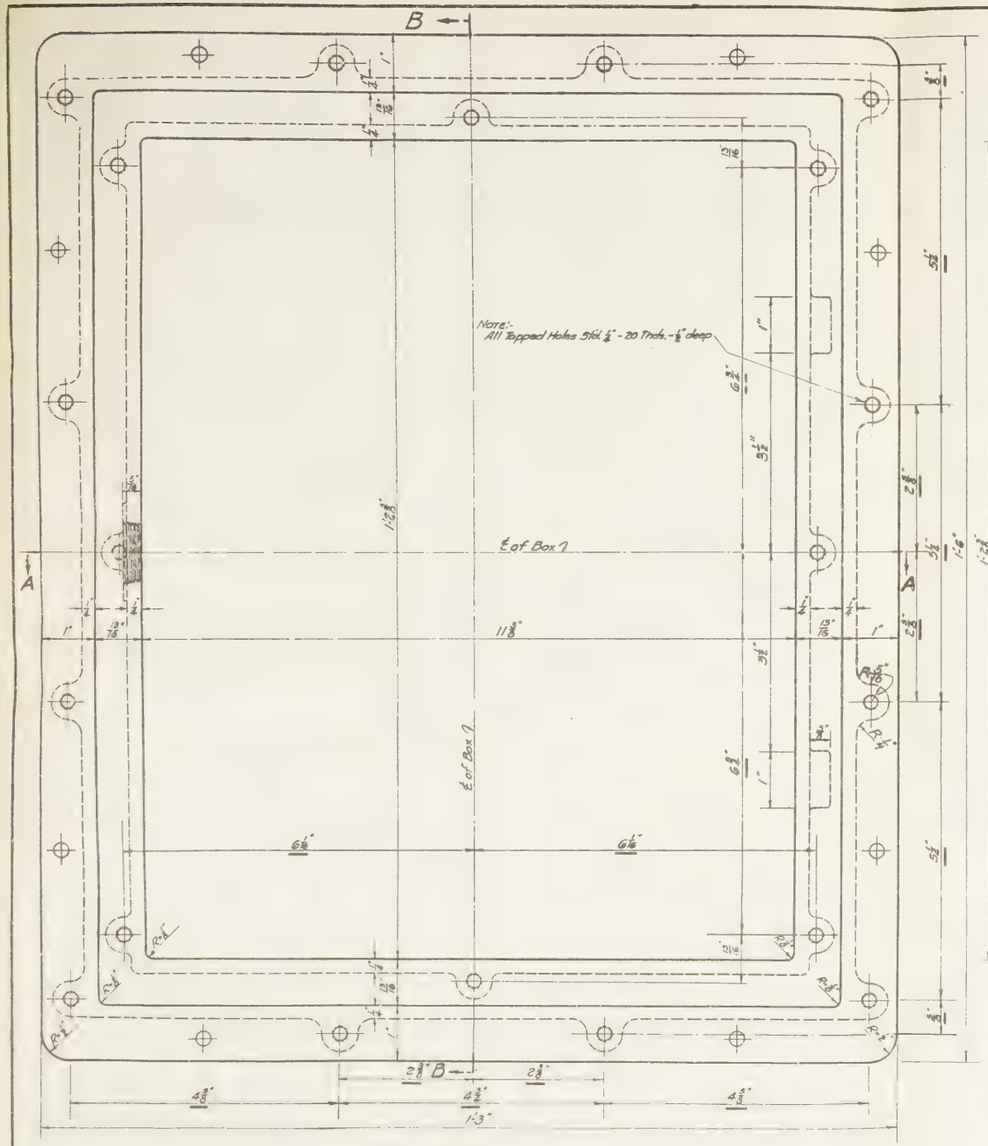
C. M. Holland
CHIEF ENGINEER

LIGHT BOX

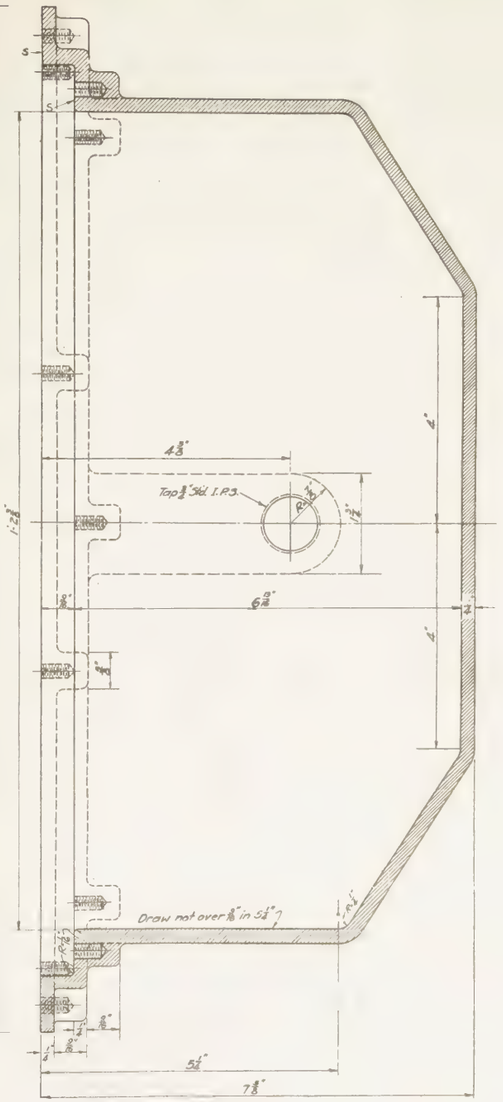
DRAWN BY M.T.E.
CHECKED BY J.H.G.

FILE NO. 1-6

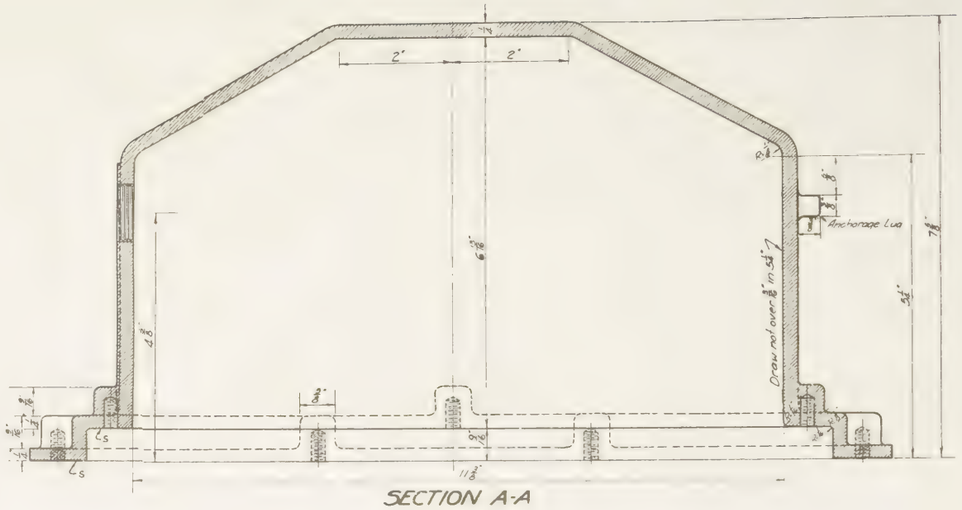
M. B. BROWN PRINTING & BINDING CO., N. Y.



PLAN



SECTION B-B



SECTION A-A

CAST IRON LIGHT BOX

NOTE:

Box to be galvanized inside and out.

All Threads to be clean and sharp, free of galvanizing and protected by rust proof material.

Surfaces marked "S" to be free of burrs and projections and to be ground if necessary.

All ½" Tapped holes to be drilled to template furnished by the Commissions to insure perfect fitting of future Frame and Cover.

Dimensions shown thus 5½" must be exact.

⊕ Holes shown thus are ½" holes for attaching box to form and are to be located approximately as shown.

For Alinement & Profile	See Dwg. No. 1	File No. 1-6
For Structural Plans	" "	4-12	1-6
For Electrical Conduit System	" "	27-30	1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 29

SCALE: 1 INCHES. DATE: SEPTEMBER 10, 1934

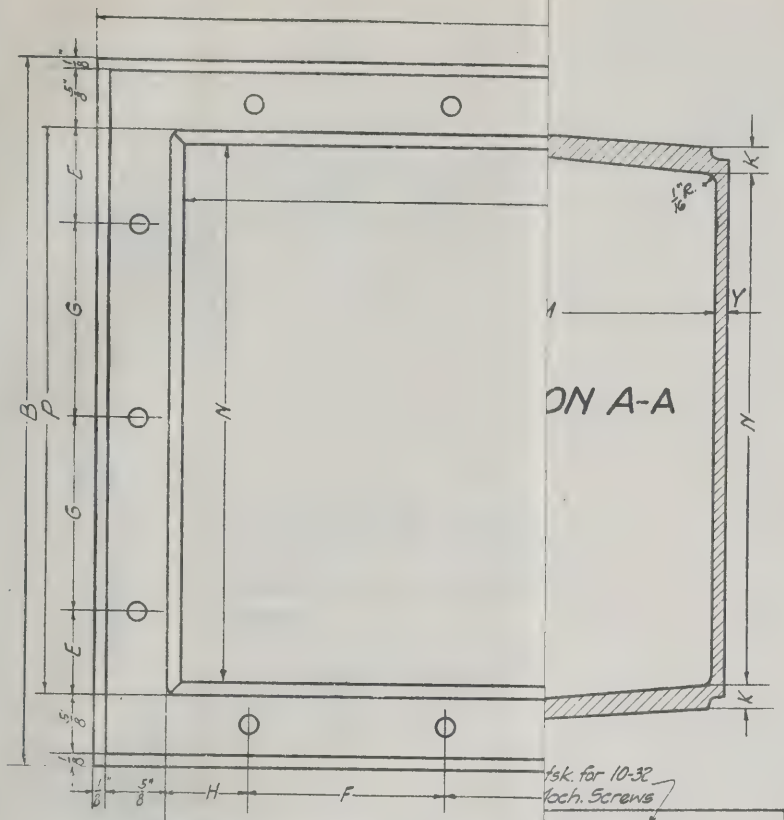
DRAWN BY M.T.E.
CHECKED BY

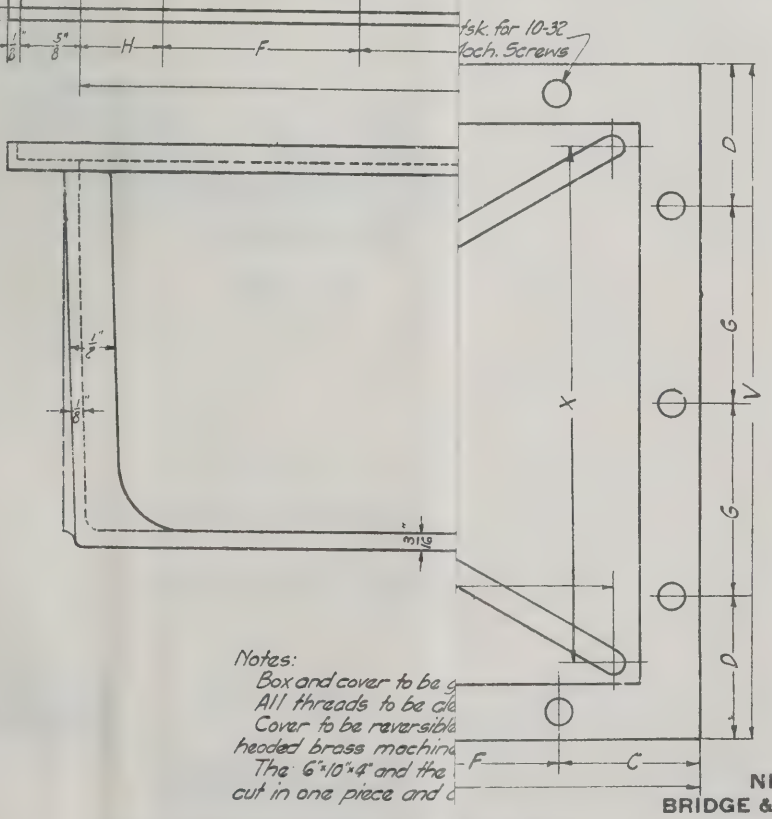
CHIEF ENGINEER

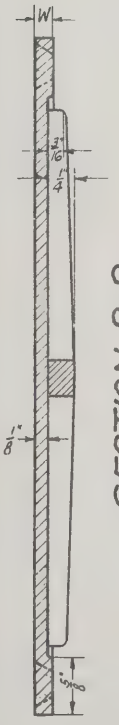
FILE NO. 1-6

Chas. Singstad
ENGINEER OF DESIGN

M. B. BROWN PRINTING & BINDING CO., N. Y.







Notes:
Box and cover to be g
All threads to be cla
Cover to be reversible
headed brass machine
The 6"×10"×4" and the
cut in one piece and c

X	Y	Z
3 3/8"	1/8"	3 3/8"
5 5/8"	1/16"	9 3/8"
7 3/8"	3/16"	11 3/8"

For Alinement and Profile
For Structural Plans of Tunnels
For Electrical Conduit System

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6.
CONTRACT DRAWING No. 30

SCALE. NO SCALE

DATE: SEPTEMBER 10, 1924

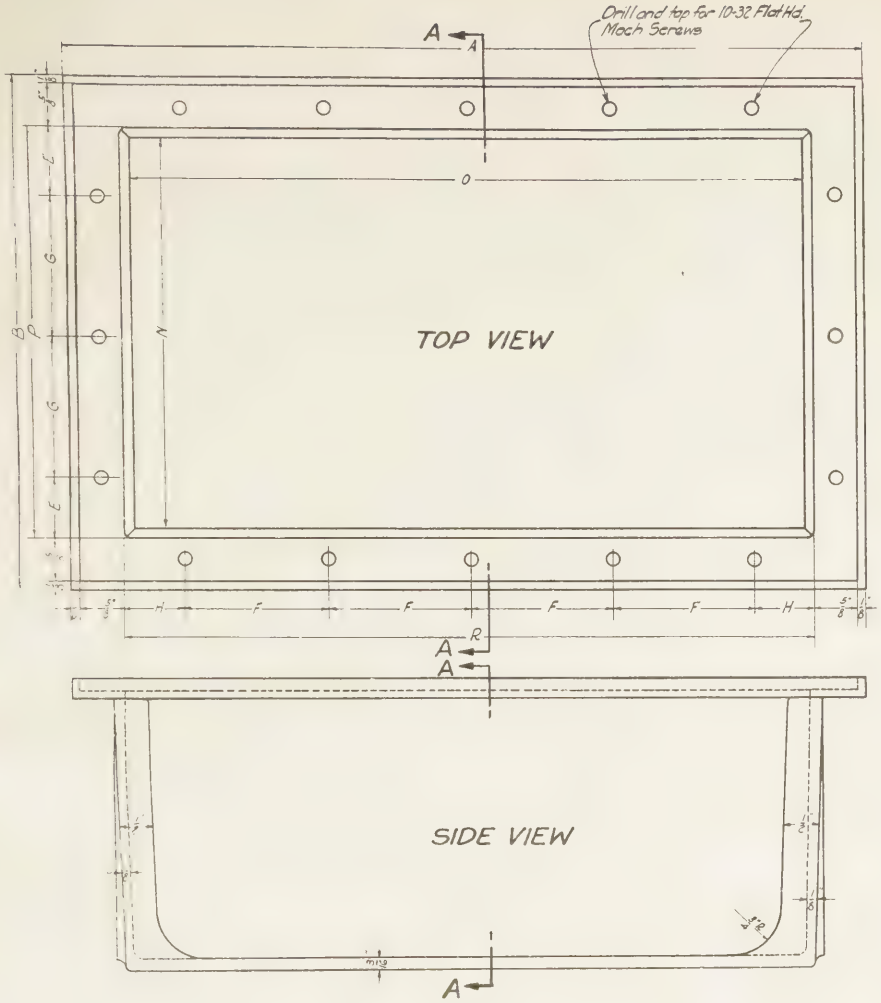
Ole Singstad
ENGINEER OF DESIGNS

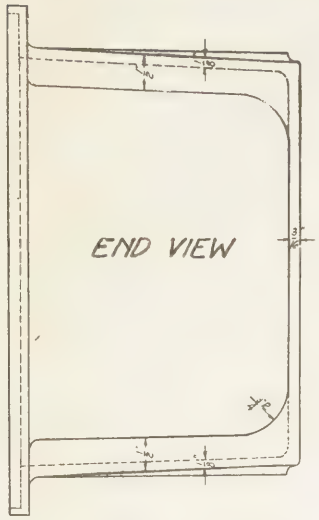
DRAWN BY V.K.O.
CHECKED BY J.A.G. J.M.C.

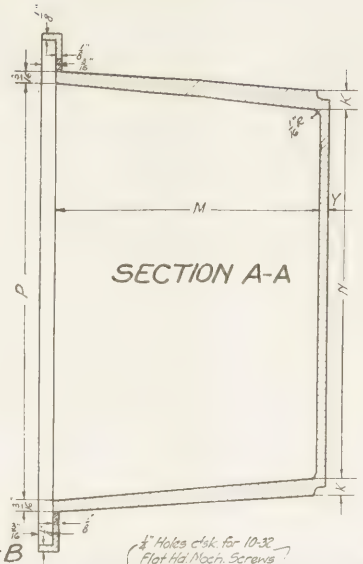
Clifford Holland
CHIEF ENGINEER

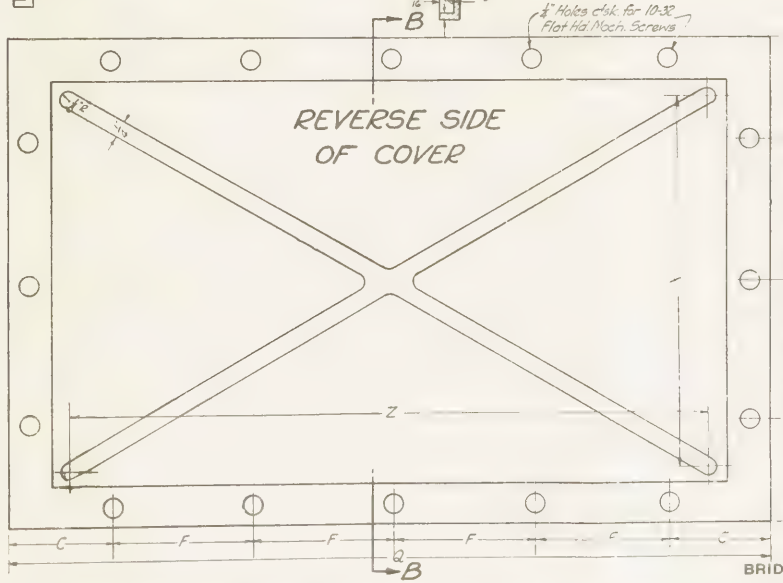
FILE NO. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.









Notes
Box and cover to be galvanized inside and out.
All threads to be clean and sharp, free from galvanizing.
Cover to be reversible, and fastened to box with 10-32 flat headed brass machine screws.
The 6"×10"×4" and the 8"×12"×4" Boxes to have ⅛" felt gasket cut in one piece and cemented to flange of box.

Type of Box	A	B	C	D	E	F	G	H	K	M	N	O	P	Q	R	V	W	X	Y	Z
4"×4"×3" deep	5⅛"	5⅛"	1⅛"	1⅛"	2"	2"	2"	2"	¼"	3"	3⅛"	3⅛"	4⅛"	5"	4⅛"	5⅛"	⅜"	3⅛"	⅜"	3"
6"×10"×4"	11"	11"	2"	2"	2"	2"	2"	2"	¼"	5"	5⅛"	5⅛"	10⅛"	5"	10⅛"	5⅛"	⅜"	5"	⅜"	5"
8"×12"×4"	13"	13"	2"	2"	2"	2"	2"	2"	¼"	7"	7⅛"	7⅛"	8⅜"	12"	8⅜"	12"	⅜"	7"	⅜"	11"

For Alinement and Profile see Dwg No. 1 File No. 1-6
For Structural Plans of Tunnels " " "2-12" " " 1-6
For Electrical Conduit System " " "27-29" " 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6.
CONTRACT DRAWING No. 30

Ole Singstad
ENGINEER OF DESIGN

CAST IRON PULL BOXES

SCALE NO SCALE
DATE SEPTEMBER 10, 1924
DRAWN BY E.G.P.
CHECKED BY J.A. J.M.S.
CHIEF ENGINEER
FILE NO. 1-6

M. H. BROWN PRINTING & BINDING CO. N. Y.

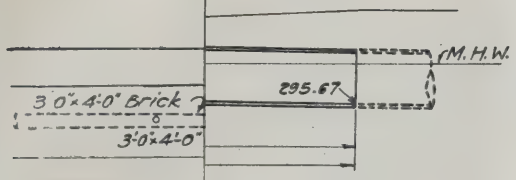
NOTES:-

For alinement and profile
see Drawing No. 1, File No. 1-6
For details of sewers at connections
see Drawing No. 32, File No. 1-6
For details of sewers and manholes
see Drawing No. 33, File No. 1-6

All existing sewers which are to be retained, shall be rebuilt if disturbed, and no payment will be made for same unless otherwise specifically provided for in the contract.

LEGEND:-

New Sewers
Existing Sewers retained
Existing Sewers abandoned
New Manholes
Existing Manholes
Existing Basins



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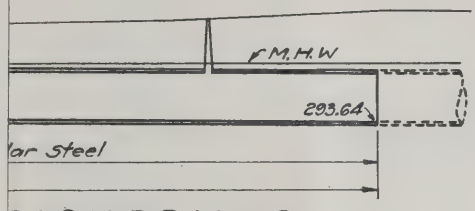
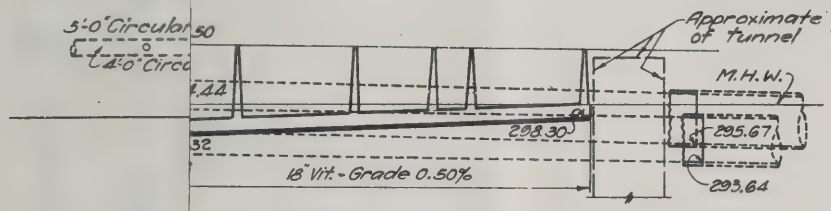
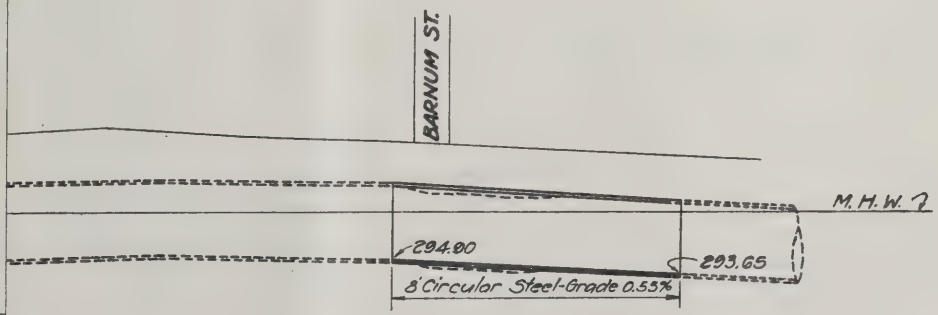


O.L.&W. R.R. YARD



13TH ST.



12TH ST.

3'0"x4'0" Bri

PROFILES

Scale:- 0 40 80 160 Feet

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 31

SCALE: AS SHOWN

DATE SEPTEMBER 10, 1924

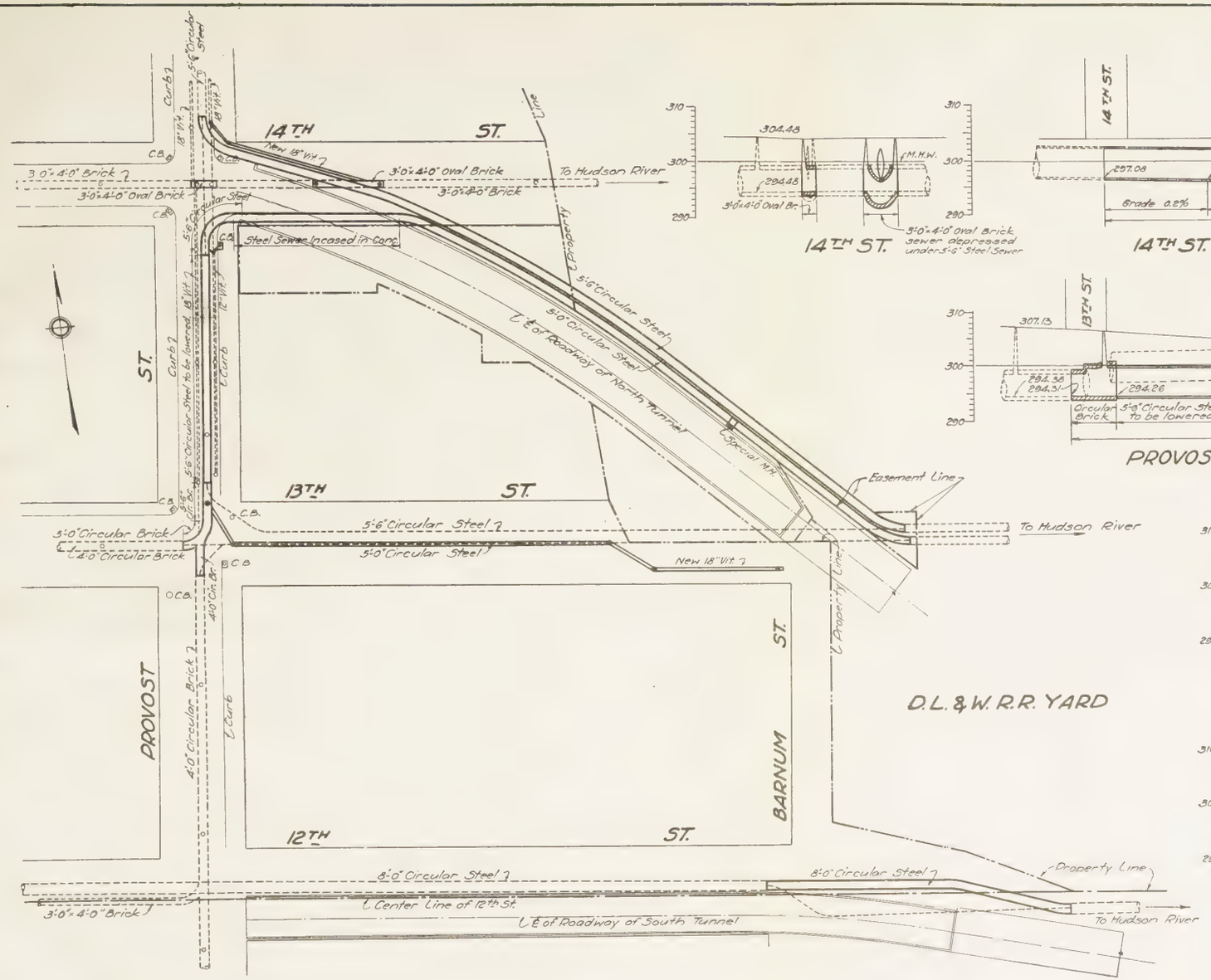
DRAWN BY O.M.-L.M.M.
CHECKED BY J.S.V.

CHIEF ENGINEER

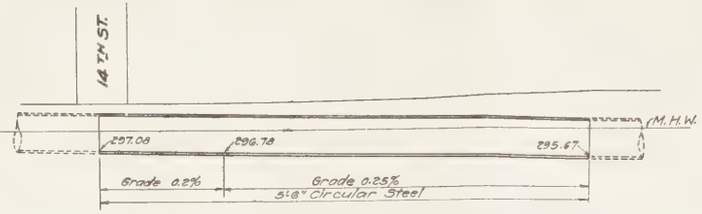
FILE NO. 1-6

Ole Singstad
ENGINEER OF DESIGN

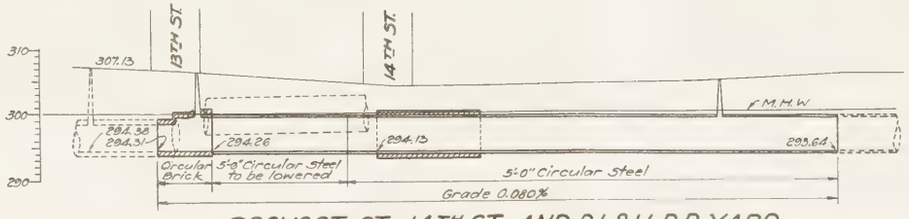
M. B. BROWN PRINTING & BINDING CO., N. Y.



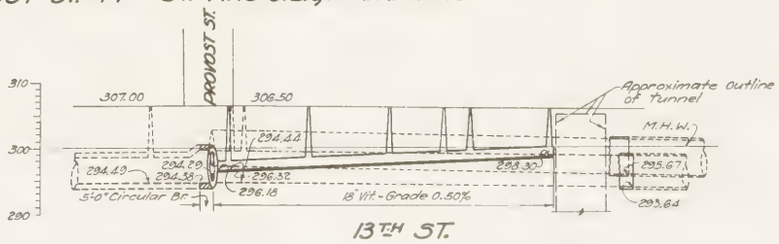
14TH ST.



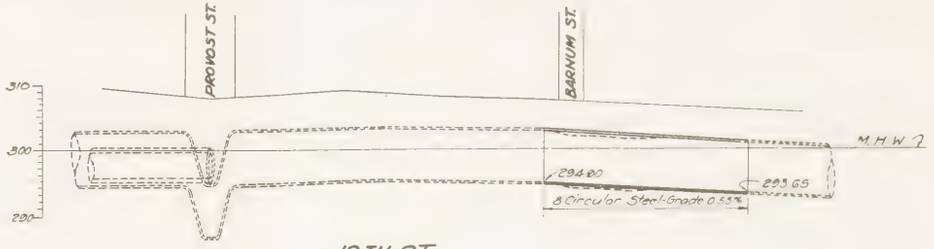
14TH ST. AND D.L.&W.R.R. YARD



PROVOST ST.- 14TH ST. AND D.L.&W. R.R. YARD



13TH ST.



12TH ST.

PROFILES

Scale:- 0 40 80 160 Feet

NOTES:-

For alinement and profile see Drawing No. 1, File No. 1-6
For details of sewers at connections see Drawing No. 32, File No. 1-6
For details of sewers and manholes see Drawing No. 33, File No. 1-6

All existing sewers which are to be retained, shall be rebuilt if disturbed, and no payment will be made for same unless otherwise specifically provided for in the contract.

LEGEND:-

New Sewers
Existing Sewers retained
Existing Sewers abandoned
New Manholes
Existing Manholes
Existing Basins

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

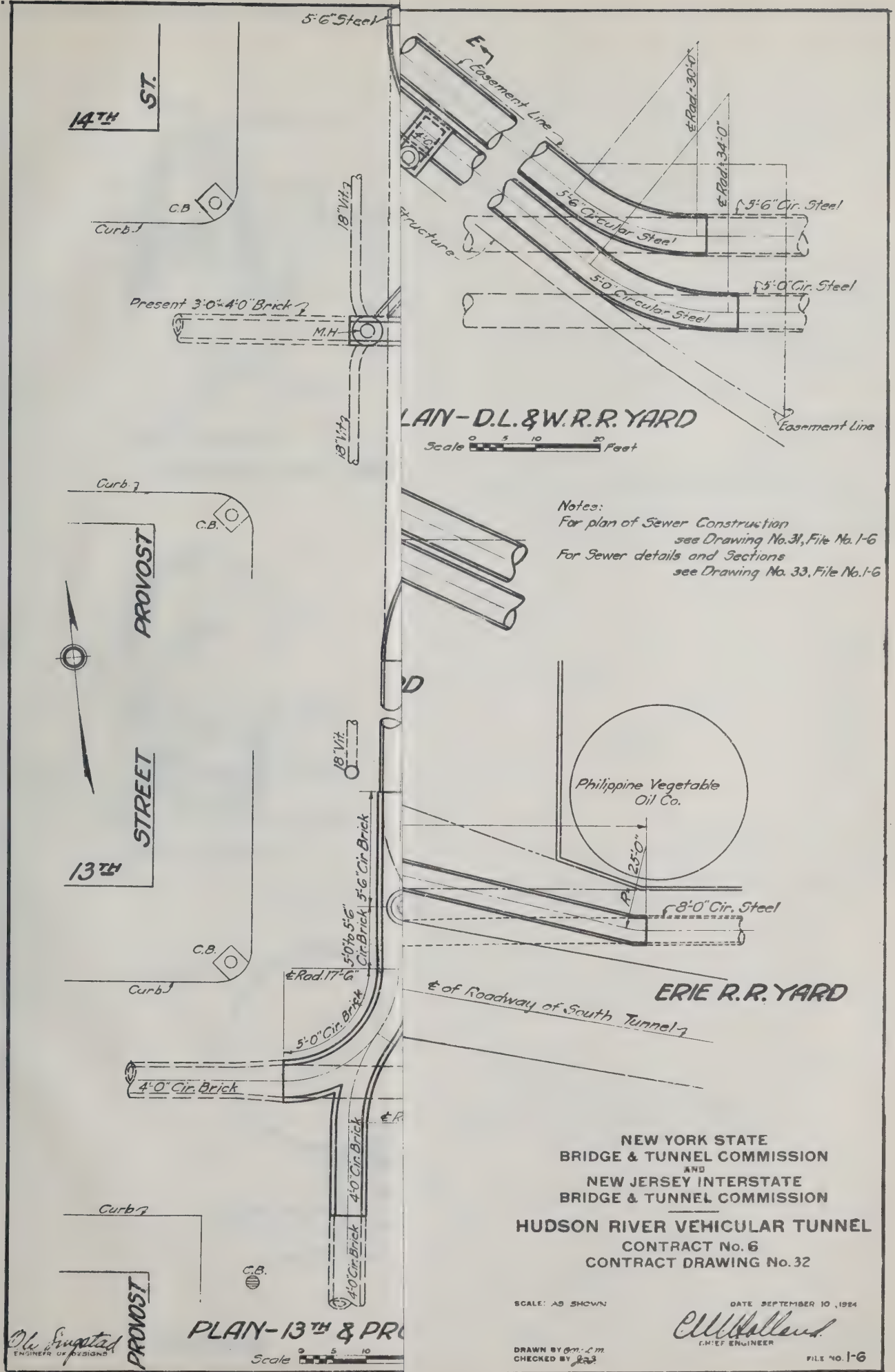
HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 31

SCALE AS SHOWN
DATE SEPTEMBER 13, 1924
DRAWN BY
CHECKED BY
CHIEF ENGINEER
FILE NO. 1-6

Ole Singstad
ENGINEER OF RECORD

PLAN OF SEWER CONSTRUCTION

M. B. BROWN PRINTING & BINDING CO., N. Y.



Notes:
For plan of Sewer Construction
see Drawing No. 31, File No. 1-6
For Sewer details and Sections
see Drawing No. 33, File No. 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 32

SCALE: AS SHOWN

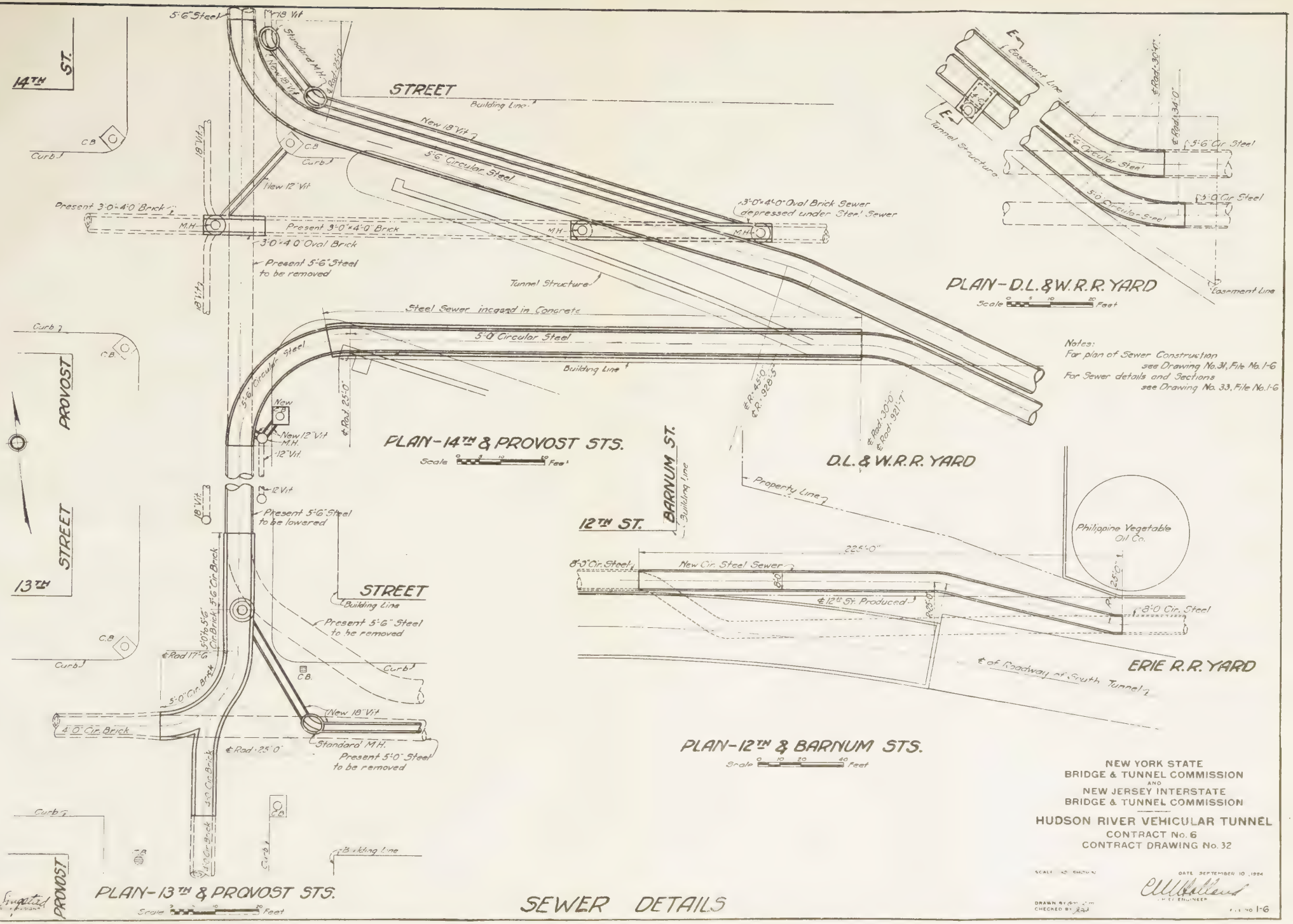
DATE SEPTEMBER 10, 1924

Ole Singstad
ENGINEER OF DESIGNS

C. M. Holland
CHIEF ENGINEER

DRAWN BY G.M.-L.M.
CHECKED BY [illegible]

FILE NO. 1-6



NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 32

SCALE AS SHOWN

DATE SEPTEMBER 10, 1924

DRAWN BY GM
CHECKED BY RJJ

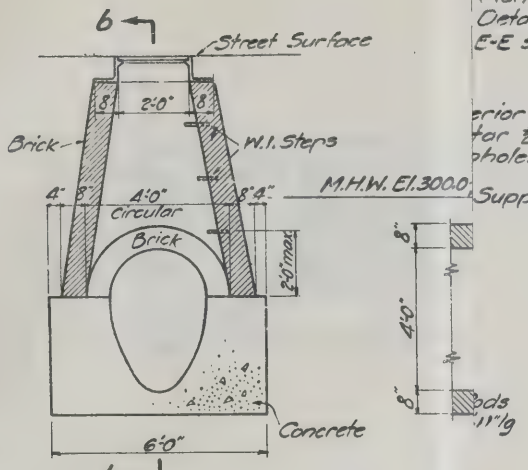
CHIEF ENGINEER

FILE NO 1-6

SEWER DETAILS

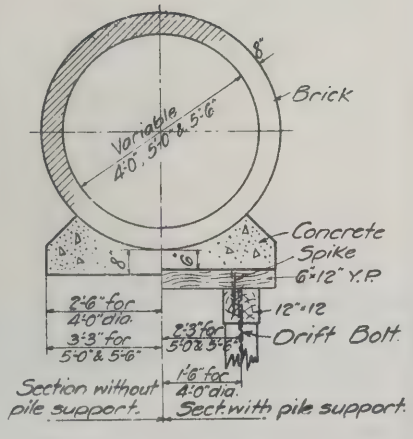
Plan of Sewer Construction see Drawing No. 31 - File No. 1-6
Details of Sewers at Connections and Location of Sect-
E-E shown on this drawing see Drawing No. 32 - File No. 1-6.

erior walls of manholes to be plastered with cement
tar ½" thick.
pholes to have standard roadway C.I. frames & covers.
Supports to be used where required by the Engineer.

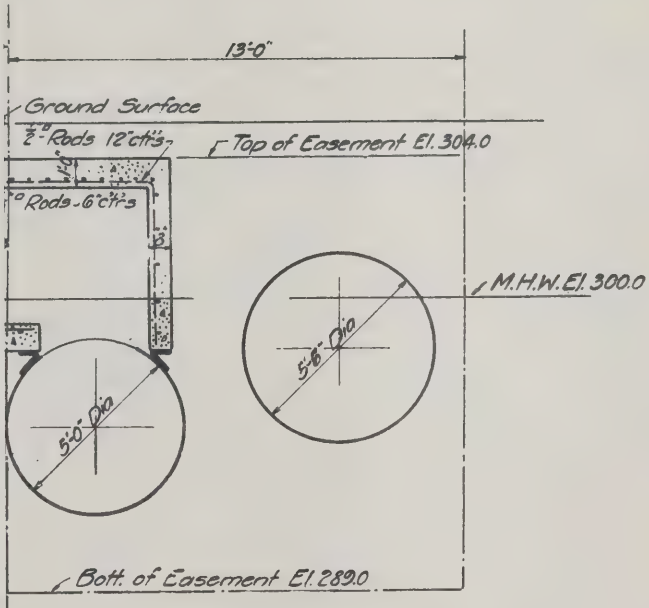


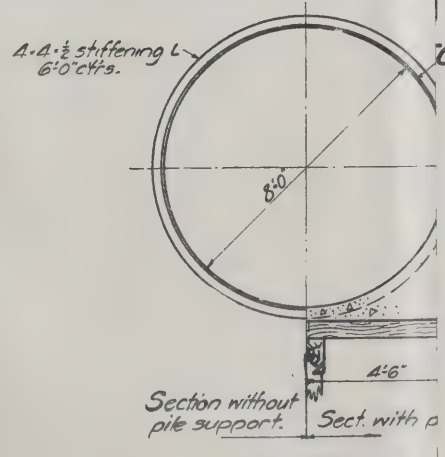
SECTION a-a

MANHOLE FOR EGG



BRICK SEWER





CIAL MANHOLE FOR STEEL SEWER
SECTION E-E

SECTION

8

Ole Singstad
ENGINEER OF DESIGNS

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 33

SCALE: 0 1 2 3 FEET

DATE: SEPTEMBER 10, 1924

C. E. ENGINEER

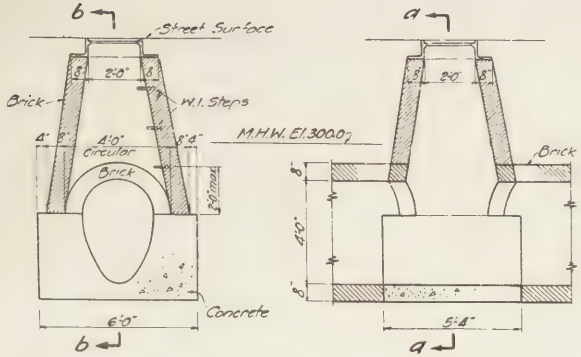
DRAWN BY CJ. - Com. [illegible]
CHECKED BY [illegible]

FILE No. 1-6

For Plan of Sewer Construction see Drawing No. 31. File No. 1-6
For Details of Sewers at Connections and Location of Section E-E shown on this drawing see Drawing No. 32 - File No. 1-6.

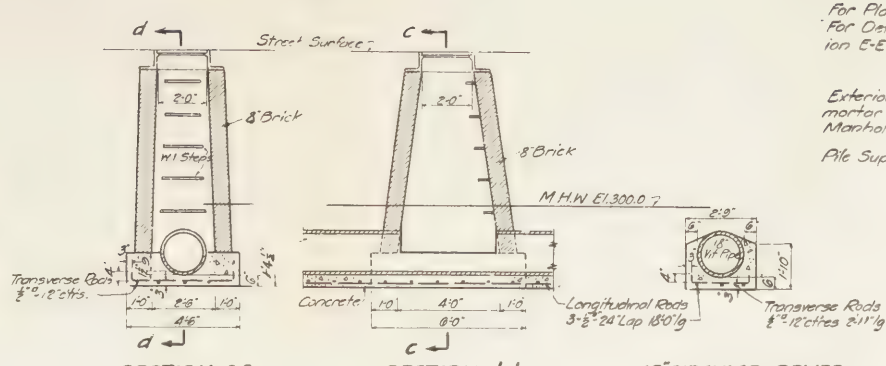
Exterior walls of manholes to be plastered with cement mortar ½" thick.
Manholes to have standard roadway C.I. frames & covers.

Pile Supports to be used where required by the Engineer.



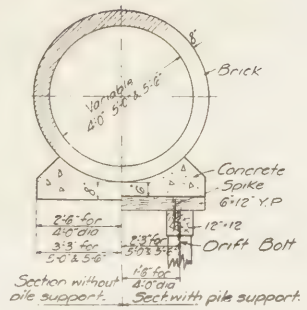
SECTION a-a SECTION b-b

MANHOLE FOR EGG SHAPE SEWER

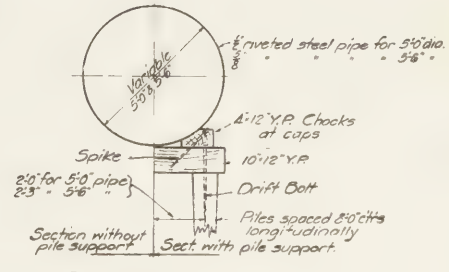


SECTION c-c SECTION d-d 18" CIRCULAR SEWER

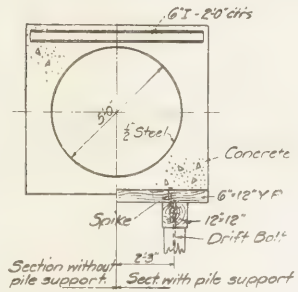
MANHOLE FOR VITRIFIED SEWER



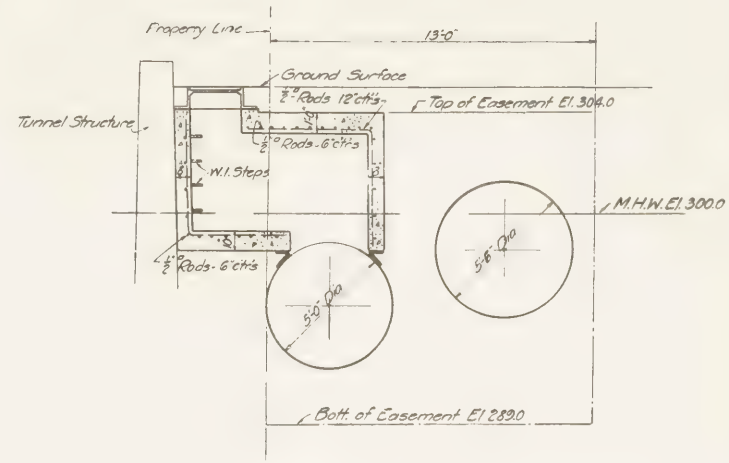
BRICK SEWER



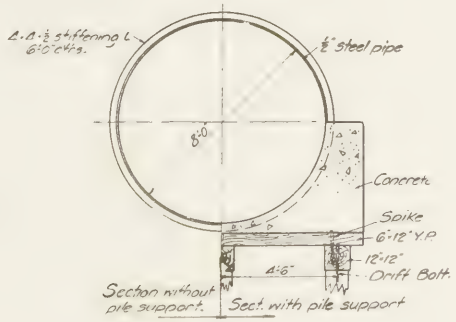
5'-0" & 5'-6" STEEL SEWER



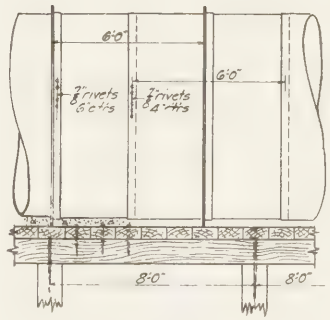
STEEL SEWER IN CONCRETE



SPECIAL MANHOLE FOR STEEL SEWER
SECTION E-E



SECTION



ELEVATION
Section with pile supports

8'-0" STEEL SEWER

C. L. Ingstad
ENGINEER OF DESIGN

SEWER DETAILS

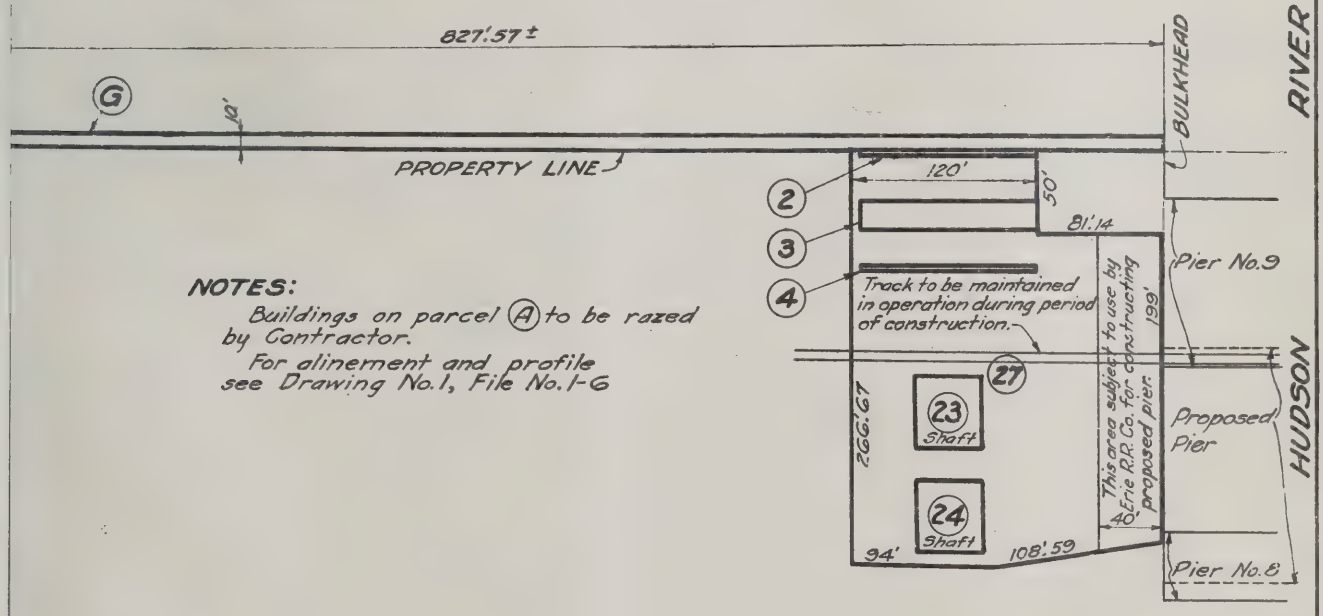
NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 33

SCALE: 0 1 2 3 FEET
DATE: SEPTEMBER 10, 1924
DRAWN BY: A. [illegible]
CHECKED BY: [illegible]
C. E. ENGINEER
FILE NO. 1-6

LEGEND:

- (A) Denotes area available for Contractor's use.
- (B) Denotes area available for Contractor's use and for railroad siding.
- (C) Denotes area available for Contractor's use for a period of 16 months
- (D) (1) Denote areas available for Contractor's use and location of tunnel structures.
- (E) Denotes area available for Contractor's use and location of sewers for a period of 6 months.
- (F) Denotes area available for Contractor's use and location of tunnel structures for a period of 12 months.
- (G) Denotes area available for Contractor's use as a roadway for a period of 10 months [subject to the use of other Contractors.]
- (21) Denotes area available for Contractor's use and location of tunnel structures for a period of 16 months [subject to the use of other Contractors.]
- (2) (3) (4) (27) Denote areas available for Contractor's use and location of tunnel structures for a period of 10 months.
- (25) (30) Denote areas available for Contractor's use and location of tunnel structures for a period of 12 months.
- (23) (24) Denote areas not available for Contractor's use.



NOTES:

Buildings on parcel (A) to be razed by Contractor.

For alinement and profile see Drawing No. 1, File No. 1-6

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL

CONTRACT No. 6
CONTRACT DRAWING No. 35

SCALE: 0 20 40 60 FEET

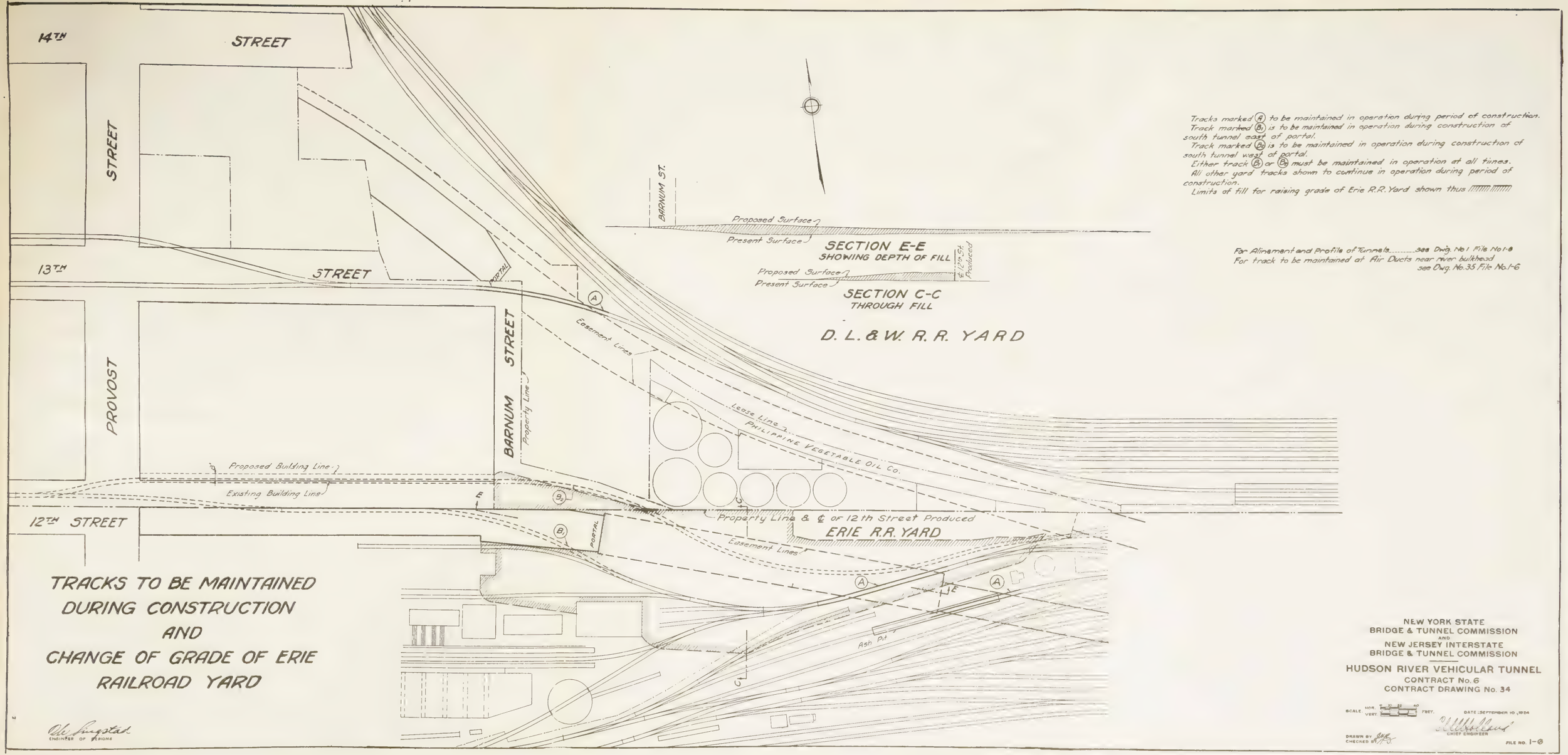
DATE: SEPTEMBER 10, 1924

CHIEF ENGINEER

DRAWN BY GH. C.K.M.
CHECKED BY

FILE No. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y



Tracks marked (A) to be maintained in operation during period of construction.
Track marked (B1) is to be maintained in operation during construction of south tunnel east of portal.
Track marked (B2) is to be maintained in operation during construction of south tunnel west of portal.
Either track (B1) or (B2) must be maintained in operation at all times.
All other yard tracks shown to continue in operation during period of construction.
Limits of fill for raising grade of Erie R.R. Yard shown thus ////////

For Alinement and Profile of Tunnels ..... see Dwg. No. 1 File No. 1-8
For track to be maintained at Air Ducts near river bulkhead see Dwg. No. 35 File No. 1-6

TRACKS TO BE MAINTAINED DURING CONSTRUCTION AND CHANGE OF GRADE OF ERIE RAILROAD YARD

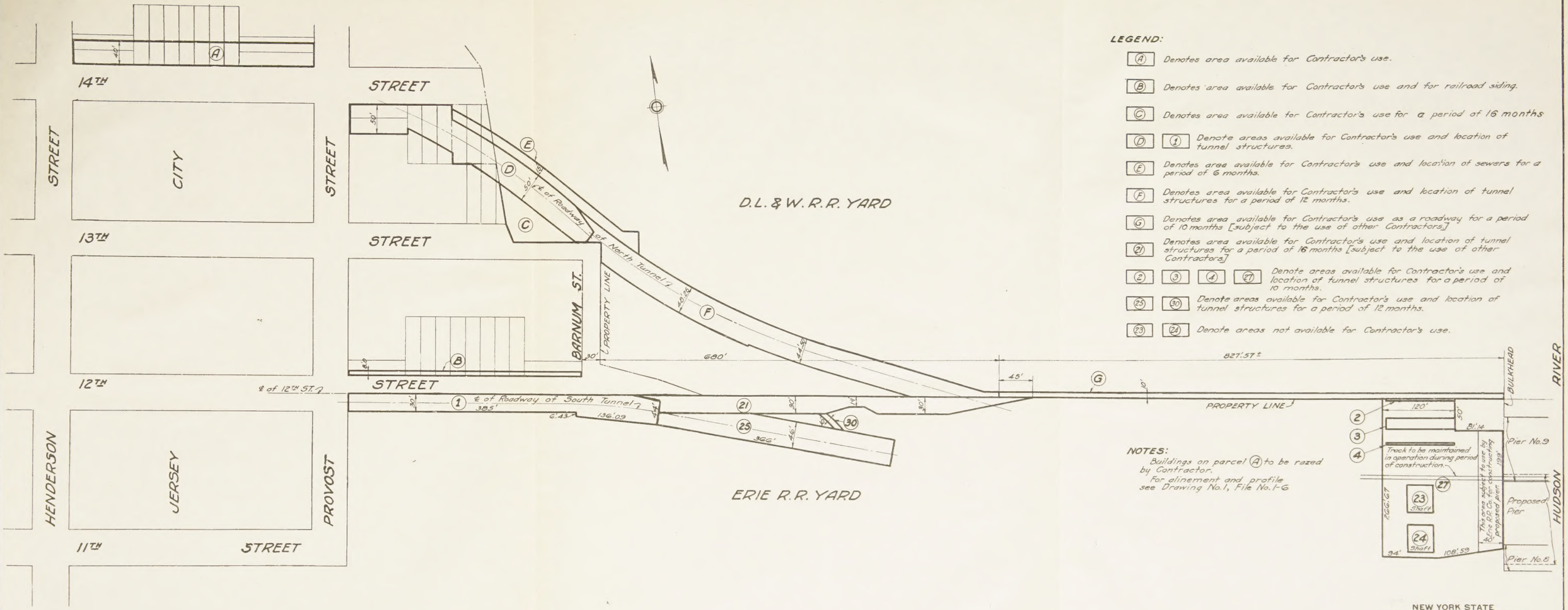
Ole Singstad
ENGINEER OF TUNNELS

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 34

SCALE: HOR. 0 20 40 FEET. VERT.
DATE: SEPTEMBER 10, 1934
DRAWN BY: JHK
CHECKED BY:
CHIEF ENGINEER
FILE No. 1-0

M. B. BROWN PRINTING & BINDING CO., N. Y.


14TH STREET
STREET
CITY
13TH STREET
STREET
BARNUM ST.
PROPERTY LINE
12TH STREET
HENDERSON
JERSEY
PROVOST
11TH STREET
D.L. & W. R.R. YARD
ERIE R.R. YARD
℄ of Roadway of North Tunnel
℄ of Roadway of South Tunnel
℄ of 12TH ST.
680'
827'.57±
385'
136'.09
366'
PROPERTY LINE
BULKHEAD
RIVER
HUDSON
Pier No.9
Pier No.8
Track to be maintained in operation during period of construction.
This area subject to use by N.Y.C. R.R. Co. for constructing proposed pier
Proposed Pier
Shaft
Shaft
120'
81'.14
108'.59
94'
LEGEND:
Denotes area available for Contractor's use.
Denotes area available for Contractor's use and for railroad siding.
Denotes area available for Contractor's use for a period of 16 months
Denote areas available for Contractor's use and location of tunnel structures.
Denotes area available for Contractor's use and location of sewers for a period of 6 months.
Denotes area available for Contractor's use and location of tunnel structures for a period of 12 months.
Denotes area available for Contractor's use as a roadway for a period of 10 months [subject to the use of other Contractors.]
Denotes area available for Contractor's use and location of tunnel structures for a period of 16 months [subject to the use of other Contractors.]
Denote areas available for Contractor's use and location of tunnel structures for a period of 10 months.
Denote areas available for Contractor's use and location of tunnel structures for a period of 12 months.
Denote areas not available for Contractor's use.
NOTES:
Buildings on parcel (A) to be razed by Contractor.
For alinement and profile see Drawing No.1, File No.1-6

AREA AVAILABLE FOR CONTRACTOR'S USE

Ole Singstad
ENGINEER OF DESIGNS

NEW YORK STATE
BRIDGE & TUNNEL COMMISSION
AND
NEW JERSEY INTERSTATE
BRIDGE & TUNNEL COMMISSION

HUDSON RIVER VEHICULAR TUNNEL
CONTRACT No. 6
CONTRACT DRAWING No. 35

SCALE: 0 20 40 60 FEET
DATE: SEPTEMBER 10, 1954
DRAWN BY GM, EKM
CHECKED BY
CHIEF ENGINEER
FILE No. 1-6

M. B. BROWN PRINTING & BINDING CO., N. Y.

UNIVERSITY OF ILLINOIS-URBANA
3 0112 114095562